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The G-5 communiqué: an appraisal, 1

Trade adjustment to date, 2

Inadequate adjustment assured, 3

A "free-fall" or a "hard landing"?, 5

Inflation worries, 6

The twin U.S. deficits and economic growth, 8

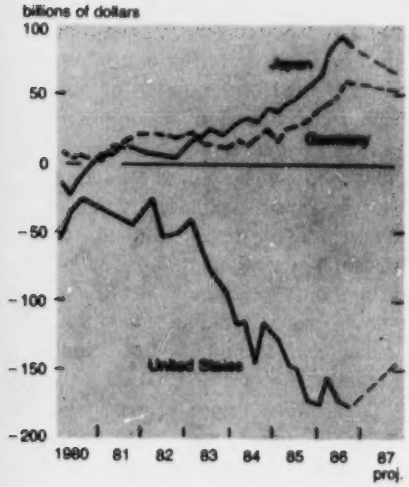
The G-5 at sixes and sevens?, 11

Statistical appendix, 13

Chart 1

Trade balances

Seasonally adjusted annual rates, CIF valuation



*The G-5 communiqué: an appraisal**

Ministers of the Group of Five (G-5) industrial countries, plus Canada, recognized at their February meeting that the U.S. and other large trade imbalances "pose serious economic and political risks." Maintaining, however, that the substantial exchange rate changes that have occurred "will increasingly contribute to reducing external imbalances," they went on to assert that their currencies are now "within ranges broadly consistent with underlying economic fundamentals, *given the policy commitments summarized in this statement*" (emphasis added). Their communiqué concluded by proclaiming agreement "to cooperate closely to foster stability of exchange rates around current levels."

The new G-5 position, including its endorsement of at least temporary currency stabilization, should be evaluated in relation to today's interrelated imperatives of rectifying the U.S. trade imbalance and, at the same time, bolstering growth in the leading industrial economies to bring them closer to economic potential — both for their own sakes and to provide the thriving export opportunities so vital for the solution of LDC debt problems.

Although the U.S. trade deficit may narrow by $20-$25 billion or so this year from the $166 billion of 1986 (see Chart 1), it looks unlikely to fall below $100 billion annually during the remainder of this decade on the basis of present exchange rates and national growth policies. Economic growth remains less than robust in the United States and is faltering in Japan and Germany, whose exports are in trouble and macroeconomic policies restrictive.

After two years of warnings of the risks of inaction, both Japan and Germany remain profoundly averse to what they consider "artificial" domestic policy stimulus. Instead, they crave a more stable dollar — in part, to avert the inflation and interest rate risks to the United States from too low a dollar but also to retain a competitive edge for their own economies. It is further argued that the twin U.S. deficits, on budget and trade, are closely linked and that both can be tackled effectively only through U.S. fiscal stringency.

The United States has begun taking its fiscal medicine, probably in larger dosage than generally recognized. Budget restraint alone, however, carries no guarantee of trade

*Statement submitted by Rimmer de Vries, Senior Vice President, Morgan Guaranty Trust Company, to the Budget and Foreign Relations Committees of the U.S. Senate in March 1987.

Table 1

U.S. bilateral trade balances

FAS/CIF valuation
billions of dollars at annual rates, not seasonally adjusted

		3 months ended Jan 1987	
	1986	Actual	Change from year earlier
Japan	—58.6	—62.9	—4.4
*Canada**	—23.3	—22.5	3.3
Western Europe	—32.3	—33.8	2.1
Germany	—15.6	—15.5	0.1
France	—3.4	—3.7	0.8
United Kingdom	—4.6	—5.9	0.4
Italy	—6.5	—5.8	1.1
Netherlands	3.5	4.1	1.2
Latin America	—13.6	—13.5	7.3
Brazil	—3.5	—3.1	0.8
Mexico	—5.2	—5.8	1.2
*OPEC***	—4.6	—4.2	3.3
Asia excluding Japan	—37.4	—41.3	—5.8
Hong Kong	—7.1	—7.7	—2.1
Korea	—15.7	—17.3	—4.8
Singapore	—6.4	—7.5	—0.8
Taiwan	—1.5	—2.2	—0.7
Other countries	0.0	—0.4	—3.4
Total preliminary	—166.8	—178.6	2.4
Total revised	—166.3		

*According to Canadian data, U.S. customs statistics understated U.S. exports to Canada by $12 billion in 1986. Annual bilateral reconciliations normally resolve this discrepancy largely in favor of the Canadian data and lead to eventual revision of the U.S. balance of payments basis trade statistics.

**Excluding Ecuador, Indonesia, and Venezuela.

deficit correction and satisfactory world economic growth *simultaneously*. The outcome depends on policies beyond exclusive U.S. Administration or Congressional control. For example, if U.S. monetary policy is now to be dedicated to dollar stability at current exchange rates, U.S. interest rates likely will have to be higher than would be otherwise necessary. Instead, U.S. fiscal restraint should be matched, indeed outdone, by a prudent combination of easier U.S. monetary policy with *fiscal* and, to some extent, monetary policy relaxation in Japan and Europe. With easier, yet responsible, U.S. monetary policy, the U.S. economy would enjoy competitive benefit, without suffering permanent inflationary harm from the further drop in the dollar that would likely ensue. But it requires policy relaxation abroad as well to enable economic growth generally — in the United States, the other industrial countries, and the LDCs — to come out ahead even as imbalances are put right.

Trade adjustment to date

The U.S. trade deficit climbed on the CIF valuation from $148 billion in 1985 to $166 billion last year, despite a $15 billion saving on oil imports. With estimated oil savings of $19 billion and $9 billion respectively, Japan's trade surplus jumped from $56 billion to $93 billion and Germany's from $30 billion to $58 billion. Measured *in dollars*, it is unclear that the surpluses of Japan and Germany are coming down. As for the U.S. imbalance, January's red ink of $14.8 billion is consistent with the view that the deficit has stabilized but not that it is narrowing. Although the U.S. bilateral deficits with Canada and Europe have edged a little lower during the past twelve months, they have widened with Japan and spectacularly with the Asian NICs (see Table 1).

The price and exchange rate valuation changes consequent to the dollar's two-year decline have masked substantial adjustments in *volume* terms. Overall U.S. import volumes have continued to increase but the pace has moderated. While some foreign suppliers have made strong new inroads into the U.S. market — for example, Korea in automobiles — the volume growth of U.S. manufactures imports generally has eased from the explosive pace of three years ago to under 10% in the second half of 1986. By contrast, volume growth in Germany's imports picked up from 4.6% in 1985 to 6.1% in 1986 as a whole, although the pace slackened toward the end of the year (see Chart 2). Following stagnation in 1985, Japan's import volume picked up steam in 1986, growing by 13.4% overall. Excluding the special factor of temporarily large gold imports, Japan's manufactures import volume rose 12%, albeit from an extremely low base.

Although January seems to have brought a new, and probably temporary, setback, overall U.S. export volume jumped 9% in the final quarter of 1986 above the third-quarter level. This was a significant change of direction, following steady declines that amounted to 22% in manufactures and 36% in agricultural products from the end of 1980 through the third quarter of 1986. Both Japan and Germany appear to be losing market share and sales volume in the U.S. market. Japan's overall export volume, which attained a peak growth rate of 16% in the first half of 1984, declined throughout 1986 (see Chart 3). Germany's export volume growth has eroded more gradually, but virtually halted by the end of 1986.

The shifting trends in export and import volumes mean that net foreign trade now is contributing posi-

Chart 2

Import volumes

half-year percent change from year earlier

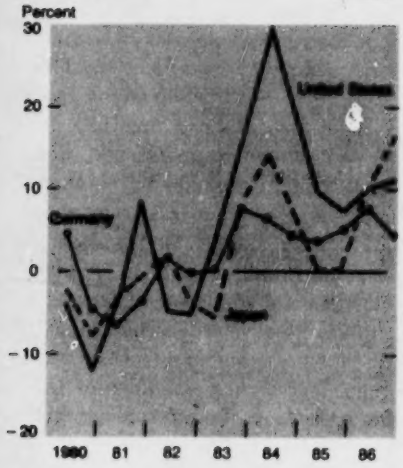
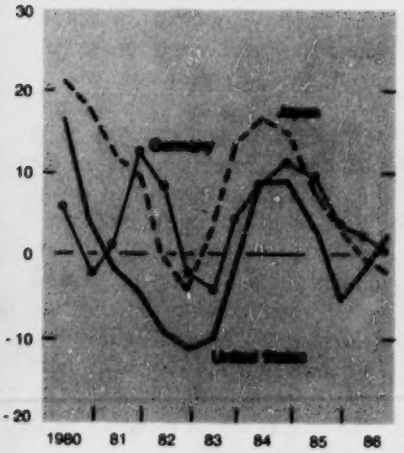


Chart 3

Export volumes

half-year percent change from year earlier



tively to U.S. real GNP growth: indeed, the $12 billion gain in real net exports recorded in the fourth-quarter 1986 GNP accounts provided the entire 1.3% quarter-to-quarter growth in economic activity overall. During 1984-85 and well into 1986, it was the common U.S. lament that an ever-widening trade deficit was bleeding off, to the benefit of foreign rivals, domestic demand growth that might have been met by U.S. firms (see Table 2). This can no longer be said. Instead, the clog now cramps the other foot. Falling real net exports have subtracted from real GNP growth in Japan and Germany since 1985, especially in Japan. Thus despite a sizable increase in Japanese domestic demand during 1986, its fourth-quarter real GNP gain is estimated to have sagged to 1.3%, year on year, compared with an average of 4% annually during the earlier years of the 1980s. In Germany's case, real GNP actually declined during the final quarter of 1986 and its growth was only 2.6% over the course of the year — hardly different from the pace of 1983-85 and a far cry from the ebullient projections celebrated by most European commentators not long ago.

It is an open question how far these net export swings should be attributed to exchange rate shifts. Domestic demand is a key determinant of both exports and imports, especially the latter. This was clearly the case in 1984, when U.S. domestic demand was roaring ahead and sucked in imports from everywhere. Since 1984, U.S. domestic demand growth has receded greatly, contributing importantly to the moderation of non-oil import growth. Conversely, the step-up in domestic demand growth helps explain recent import growth in both Japan and Germany.

The separate power of the exchange rate factor is more visible in exports. Japan's have been hit much harder than Germany's during the past two years. Although the yen and the mark have appreciated by similar amounts against the dollar, the yen's real effective exchange rate has risen 27%, the mark's just 19%. The difference reflects Japan's closer trade ties with countries whose currencies have weakened. Almost 40% of Japan's total exports went to the United States last year, but only 11% of Germany's. A further 14% of Japan's exports went to the Asian NICs, whose currencies have broadly followed the dollar. Nearly 70% of Germany's 1986 exports went to other European countries, lessening its direct exposure to dollar depreciation.

The protracted weakness of U.S. exports through most of 1986 disguised what would have been a more drastic decline had the dollar remained at its high levels of 1983-85. It need not preclude substantial export gains this year and next. Still, the benefit of dollar depreciation remains unclear: the fact that export volume has begun to rise only in the most recent months suggests a weaker response than generally assumed and one with rather long lags in a sluggish world environment.

Inadequate adjustment assured

The G-5 view of the "fundamentals" does not establish that an acceptable or sustainable international distribution of trade and current account imbalances is in the bag. Although the dollar has fallen from its peak by over 40% against the yen and the mark, the broad index of the dollar that includes 18 industrial- and 22 developing-country currencies shows little more than a 20% inflation-adjusted decline. Moreover, the index remains more than 10% above its 1980 average (see Table 3).

If the dollar remains at current

Table 2

Real GNP

percent change, seasonally adjusted annual rates

	1982Q3-1984Q2	1984Q2-1985Q4	1985Q4-1986Q4
United States total	5.9	2.6	2.1
*Domestic**	7.7	3.5	2.6
*Foreign**	—1.8	—0.9	—0.5
Japan total	4.2	4.6	1.3
*Domestic**	2.6	3.9	3.1
*Foreign**	1.6	0.7	—1.8
Germany total	2.1	3.1	2.6
*Domestic**	1.7	2.4	3.3
*Foreign**	0.4	0.7	—0.7

*Contributions as percent of beginning period GNP.

Table 3

Dollar exchange rates

units per dollar, except as noted

		% change in dollar since	
	Feb 27, 1987	Feb 85 (avg)	1980 (avg)
*Nominal effective**			
Traditional	96.7	—29.1	6.6
*Real effective**			
Traditional	92.6	—29.9	3.0
Broad	101.2	—23.0	11.8
Dollar vis-à-vis			
Japanese yen	153	—41.0	—32.5
German mark	1.83	—44.4	0.7
French franc	6.08	—39.6	43.9
British pound	1.55**	—41.0	50.3
Italian lira	1299	—36.0	51.7
Canadian dollar	1.35	—1.4	15.5

*1980-82=100; traditional: dollar against currencies of 15 other industrial countries; broad: dollar against currencies of 18 other industrial countries and 22 developing countries.
**Dollars per pound.

levels indefinitely, Table 4 projects that the $166 billion deficit on the CIF valuation in 1986 should narrow to about $140-$145 billion this year and perhaps as low as $120 billion in 1988. Thereafter, however, the trade deficit would likely begin to widen again. Manufactures trade would suffer eroding U.S. competitiveness as domestic costs outpace those of Japan and Germany. Also, petroleum trade is likely to deteriorate. The 1986 decline in U.S. production, coupled with rising consumption and stockpiling, drove up gross oil imports to 6.6 million bpd, 27% above the 1985 level. The oil import bill could rise $30 billion or more by the end of the decade (see Table 5).

The prospects for the current account are largely dictated by those for the trade account, direct investment income, and net interest payments to foreigners associated with the U.S. shift into debtor status. U.S. net external debt, including direct investment at book value, stood around $260 billion at the beginning of 1987. Direct investment income may show little change this year but, due to the debt buildup, net interest payments of $28 billion could be some $12 billion higher than in 1986. Hence the $20-$25 billion trade improvement may result in no more than a $10 billion reduction in the current account deficit.

Indeed, the current account deficit could begin widening again toward the end of next year. On the optimistic assumption of 5.5% Treasury bill rates, it may approach $160 billion annually by 1990, with net interest payments to foreigners exceeding $40 billion, and the accumulated net debt $840 billion. These figures would run higher if interest rates rise. Moreover, the examples of the United States in 1971, New York City in 1975, and Mexico in 1982 underline that financial market tolerance has its limits, unpredictable though they be, especially if confidence weakens for any reason.

The clear message of this U.S. trade, current account, and debt outlook (and its counterpart implication for the surplus countries) must be that present exchange rates, given existing expectations for U.S. and foreign economic growth, add up to inadequate and probably transient improvement in the U.S. imbalance.

More substantial and sustained correction will require some combination of a still-lower dollar and a shift in relative economic growth. Historically, a stable dollar has been consistent with a satisfactory U.S. trade balance performance only when domestic demand growth in other industrial countries handily exceeded that in the United States, as in the 1960s. In the 1970s, U.S. and foreign domestic growth were more nearly equal and a depreciating dollar served to shore up the U.S. trade balance. Between 1982 and 1985, U.S. domestic growth outpaced that of other industrial countries by a cumulative 9.5%. The consequences for the U.S. trade balance now could be offset either by sufficient additional dollar depreciation or by undoing and reversing the *accrued* domestic demand gap. The gap was little changed in 1986 and is projected to shrink only slightly in 1987.

By itself, an increase in foreign economic growth relative to U.S. growth by one percentage point per annum would benefit the U.S. current account by about $25 billion within four years. This sounds less than impressive, given that a 10% depreciation of the dollar would yield a $40 billion benefit. But faster foreign economic growth pays off better when working *together* with a lower dollar. After all, a lower dollar crimps foreign exports. As Japan and Germany are presently discovering, export weakness ripples

Table 4

U.S. current account outlook

billions of dollars, on present economic growth prospects and with no further dollar depreciation

	1986	*1987*	*1988*	*1990*
U.S. current account	—145	—135	—120	—157
Trade balance (CIF)	—166	—145	—120	—165
Net investment income	16	4	—5	—6
Direct investment	32	32	35	38
Interest	—16	—28	—40	—44
Other invisibles	5	6	5	2
*Net foreign debt, year end**	257	400	530	843

*The net investment position of the United States with sign reversed. This projection assumes that the net equity position of the United States remains unchanged from end-1985 levels and that the counterpart of the current account deficit is a buildup of interest-paying U.S. liabilities abroad.

Table 5

U.S. oil demand and supply

millions of bpd, except as noted

	Average 1980-81	*1985*	*1986*	*1990*
Consumption	16.6	15.7	16.2	16.9
Production	—10.2	—10.6	—10.3	—9.3
*Other domestic supply**	—0.6	—0.7	—0.8	—0.8
Stock change	0.0	—0.1	0.2	0.0
Net imports	5.9	4.3	5.3	6.5
As percent of consumption	36	27	33	42
*Gross imports***	6.6	5.2	6.6	8.3
Average price, FOB (dollars per barrel)	32.8	26.6	14.6	22.0
Value (billions of dollars)	78.5	50.5	35.3	66.6

*Processing gain and unaccounted oil.
**Balance of payments basis.

through the domestic economy, depressing its growth and import demand. Although proponents of a stable dollar correctly point out that these ripple effects limit U.S. trade improvement, they could be counteracted by steps boosting foreign domestic demand. A successful boost not only can sustain and enhance foreign economies' growth and import demand but also divert foreign exporters to their own domestic markets, curbing their incentive to hang on to U.S. market share at whatever cost. Accordingly, faster foreign economic growth — or, conversely, lower U.S. growth or recession — increases the U.S. trade improvement that can be expected from any given degree of dollar depreciation. Table 6 illustrates the magnitudes involved, presenting possible scenarios for the dollar and both U.S. and foreign economic growth consistent with working the U.S. trade and current account deficits distinctly below the $100 billion mark by 1989.

If the dollar is held at current levels, meeting the trade target would require holding the U.S. economy in virtual recession while simultaneously stepping up foreign growth — to a pace that seems out of the question amid prevailing perceptions of the politically and economically feasible. Only if the dollar comes down substantially further can the trade target be achieved without forcing a U.S. recession or conjuring up an acceleration of foreign growth beyond the economically practicable. Yet a further drop in the dollar is widely assumed dangerous, and growth-boosting initiatives at best problematic. Given the gravity of the U.S. trade problem, neither assumption should pass unchallenged.

A "free-fall" or a "hard landing"?

Arguments for dollar stability often invoke the specter of a dollar in "free-fall," throwing the U.S. and world economies into a "hard landing." Whatever their emotive force, these terms typically go ill-defined and are open to misunderstanding.

The experience of the past two years can be fairly characterized as a "soft landing" adjustment from acute currency misalignment. Despite the dollar's substantial fall, the world has managed a modicum of economic growth and both inflation and nominal interest rates have fallen in the major industrial countries. Long-term interest rates in the key currencies have dropped sharply. Stock markets have soared. Dollar interest rate differentials against rates in strong currencies have narrowed (see Chart 4).

Interest differentials between currencies reflect anticipated exchange rate movements and risk premiums. In February 1985, at the dollar's peak, interest differentials discounted a dollar decline to DM2.27 and Y168 within ten years (see Table 7). Twelve months later, in February 1986, the corresponding ten-year break-even rates were DM1.81 and Y143. Thus, the dollar has passed the first break-even levels for both the mark and the yen, and for the mark has come close to the second. Obviously, the dollar's decline early this year eclipsed short-term interest differentials.

Despite contrary fears the dollar's decline has precipitated no adverse reaction in interest differentials. It has been possible because the dollar's cumulative decline occurred through successive episodes of "free fall," whereby the dollar dropped quite abruptly each time to a new level that did not inspire perceptions of imminent further downward risk. Indeed, this pattern and the cumulative scale and speed of the dollar's decline have done much to facilitate the global soft landing to date.

Table 6

Adjustment choices

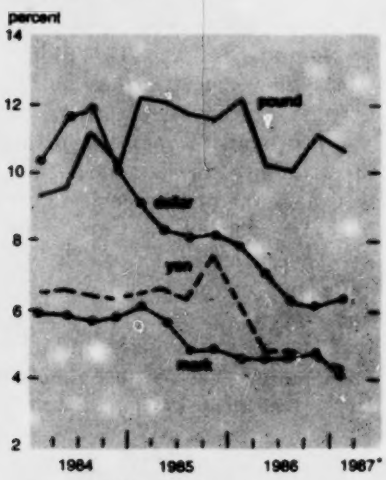
combinations of economic growth and exchange rates that will reduce the U.S. trade deficit, CIF, below $100 billion in 1989

Exchange rates, end-1988				
Yen/$	154	154	125	125
DM/$	1.85	1.85	1.60	1.60
Real GNP growth % per annum, 1987-89				
Japan	5.4	6.3	4.3	5.5
Germany	5.4	5.7	3.4	5.0
United States	1.0	2.0	2.0	3.0

Chart 4

Nominal interest rates

3-month Eurocurrency deposit rates



*Latest plotting, February 1987.

But the soft landing for the dollar could be transformed into the dreaded "hard landing" of rising U.S. interest rates and recession if, at some unknowable point in the future, investors seek to adjust their portfolios to perceptions of *heightened* dollar risk. Were the expectation to take hold of a chronically declining dollar — through official attempts to engineer a "controlled fall" or to stabilize the dollar at a level viewed by the markets as untenable — interest-rate differentials would be bound to react. U.S. interest rates would likely run substantially higher, and foreign rates only a little lower. The upshot would be the hard landing, a U.S. recession and, in due course, a worldwide downturn. The present environment of unresolved trade imbalances and inadequate policy responses by the major economies dooms long-run stabilization of the dollar at present levels. It is better that improvement in national growth policies be set in motion as soon as possible, with the dollar being allowed to attain a competitive level quickly thereafter.

Inflation worries

An upsurge in U.S. inflation is among the dangers most often imputed to a further dollar decline. Some will point to January's 8% annualized inflation rate in the consumer price index (CPI) and upturn in interest rates as proof that inflation already is taking off. Fortunately, there are weighty reasons to deem the January inflation figure an aberration. The global economy has been disinflating throughout the 1980s. In 1986, the fourth year of recovery, the rise in the GNP deflator for all industrial countries was 3.5% in local-currency terms, down from 4.2% in 1985. The U.S. deflator decelerated from 3.4% to 2.6%. Real interest rates remained high in all major countries. They actually rose in some (see Chart 5), and in the United States continue at inflation-restraining levels. Demand pressure is slight on available production capacity in industrial countries generally, including the United States: since the last cyclical peak, at the beginning of 1981, OECD industrial production has risen a slim 2% annually on average; real GNP growth has been 2.5%, well below the 3% or higher growth of output potential. The growth surge widely projected after oil prices collapsed a year ago never developed, the price stimulus to demand being offset by restrictive economic policies and unexpectedly high consumer savings in Japan and Europe. In fact, OECD real GNP grew 2.5% last year — *below* the 3% growth in 1985.

U.S. real GNP growth has held around 2.5% per annum for the past two and a half years. U.S. industrial production, which has only recently perked up, has advanced little more than 3% above the mid-1984 level. U.S. manufacturing is most recently reported operating at just under 80% of capacity, down from 82.8% in the summer of 1984 and well below the level traditionally associated with the outbreak of demand-pull inflation. In fact, it is singularly hard to identify instances of bottleneck in the U.S. economy at present. The CPI rose 1.5% over the past twelve months (see Table 8). The index was depressed by the fall in energy prices during the first half of 1986 and was pushed up by their recovery during the second. Excluding erratic food and energy prices, there is little sign that inflation is accelerating above the 3.5%-4.5% range that elicited broad satisfaction before oil prices crumbled.

Although the 1986 rise in gold prices was bound to set inflation tongues wagging,* commodity

*The gold price soared from $325 per ounce at the end of 1985 to the $420-$430 range last October, reflecting Japanese buying for special commemorative coinage and the dollar's decline (in mark or yen terms the price upturn has been modest). Partly on the prospect of increasing supply from new projects in a number of countries, the price in real terms now stands 60% below its 1980 highs.

Table 7

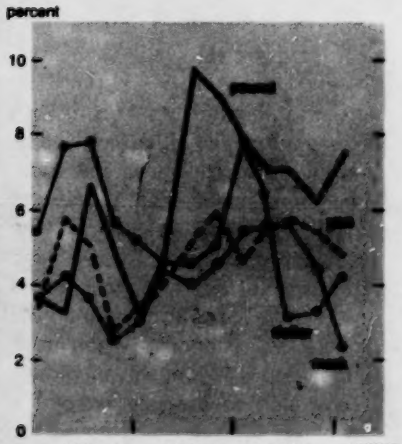
Break-even exchange rates

	One year	Three years	Ten years
Government bond yields by maturity, percent per annum			
February 28, 1985			
United States	9.73	11.02	11.92
Germany	6.73	7.03	7.67
Japan	6.65	6.84	7.16
February 27, 1986			
United States	7.46	7.81	8.14
Germany	4.37	5.06	5.92
Japan	5.35	5.46	5.63
February 26, 1987			
United States	5.87	6.52	7.20
Germany	3.98	4.75	6.10
Japan	4.13	4.32	4.96
Implied break-even exchange rates			
February 28, 1985			
DM/$ (spot 3.34)	3.25	2.99	2.27
Yen/$ (spot 259)	252	231	168
February 27, 1986			
DM/$ (spot 2.2)	2.17	2.10	1.31
Yen/$ (spot 180)	177	169	143
February 26, 1987			
DM/$ (spot 1.83)	1.79	1.74	1.65
Yen/$ (spot 153)	151	144	124

Chart 5

Real interest rates

*3-month Eurocurrency deposit rates deflated by consumer prices**



*The inflation adjustment uses centered 6-month rates of change in consumer prices, including projections for 1987 when necessary.

**Latest plotting, February 1987.

prices in general show no great buoyancy. Food prices have continued their long-standing erosion. Although industrial commodity prices climbed markedly during the last months of 1986, they have stabilized in recent weeks and are far below their early-1980s peaks. The January run-up in oil prices stemmed primarily from stiffening OPEC pricing and production discipline. However, stabilization around $18 per barrel still remains only a goal, not an accomplished fact. In all, given the dollar's depreciation since 1985, the major conclusion from commodity prices must be that the global excess of capacity and production over demand is more profound than virtually all analysts have conceived.

U.S. non-oil import prices accelerated considerably during 1986 but their 6% cumulative rise from their 1985 lows has been far short of the dollar's depreciation. Thus the "pass-through" of dollar depreciation into U.S. import prices has been both tardy and incomplete. Several reasons may be cited. First is the time lag between contract and delivery. Second, lacking robust alternative export or domestic markets and unwilling to give up U.S. market share, foreign exporters often have chosen to let their formerly fat U.S. profit margins take the strain of the dollar's fall. Third, U.S. producers are switching their outside sourcing from areas disadvantaged by the dollar's fall — principally, Japan and continental Europe — in favor of the Asian NICs and the like, or, in what may prove a gathering trend, to U.S. locations. Exchange rate pass-through will remain incomplete for the foreseeable future. However, it will increase as imports recently contracted are actually delivered, as is inevitable and also desirable, because currency depreciation can yield its full benefits only if relative prices adjust decisively. Now that import profit margins are much compressed, it can be expected that any further dollar depreciation will pass through more fully than the depreciation to date.

The outlook for the general U.S. price level hinges on domestic price response to import prices and the concurrent behavior of "domestically generated" inflation. Now that non-oil imports amount to 8% of GNP, compared with 6% in 1980 and 5% ten years earlier, a tighter link may be developing between domestic and import pricing. But at present, however tight the link may be in certain sectors, it still appears loose for U.S. industry as a whole. Thus, despite the acceleration in non-oil import prices, U.S. producer prices, excluding food and energy, remain subdued: intermediate goods prices are up just 0.6% over the past twelve months; finished goods prices are up some 2.8%, concentrated in the automobile industry.

At the consumer level, goods prices generally, even excluding energy, must be characterized as soft. Most encouraging, the 4.2% 1986 increase in services prices was the lowest since the recession year of 1982 and dramatically below the 1980 peak rate of over 14%. Moreover, since many services are not exposed to international competition, they feel little upward price pressure from the dollar's fall. Services dominate goods in U.S. economic life, as is recognized in the newly revised CPI, and their pricing imparts substantial inertia to consumer prices overall.

Of course, whatever the general picture, some prices show sizable increases. Often these represent no more than a *relative* price level correction, responding to sectoral cyclical recovery or external pressure associated with the dollar's decline. In other cases, rising prices correspond to long-established inflationary proclivities, such as in health

Table 8

U.S. Inflation

*selected indices, annual rate percent changes**

	Latest 12 months	Latest 6 months	Latest 3 months*
GNP deflator			
Implicit	2.6	2.4	0.5
Fixed weight	2.7	2.3	2.7
Non-oil imports	3.3	5.6	8.3
Consumer prices	1.5	3.5	4.4
Excluding food and energy	3.8	4.0	4.2
Goods	—1.3	3.1	4.9
Excluding food and energy	1.4	2.4	3.2
Services	4.3	4.0	4.3
Excluding food and energy	5.1	4.9	4.7
Producer prices			
Finished goods	—1.5	0.7	2.9
Excluding food and energy	2.8	2.7	3.7
Intermediate goods	—3.2	—1.9	1.0
Excluding food and energy	0.6	0.9	1.7
*Commodity prices***	—9.2	8.1	12.7
Food	—9.1	—6.0	—3.2
Industrials	—5.9	9.0	26.8
Gold	16.6	32.5	—14.9

*Data are through January 1987, except for commodity prices (February) and the GNP deflators (1986 Q4).
**Commodity Research Bureau.

care, where market discipline is weak, and in automobiles, where protection from imports has underwritten ingrained habits and the domestic producers evidence little stomach for the effort to reclaim home-market share.

Wage behavior provides the most persuasive evidence that U.S. inflation will remain well contained on the whole for some time to come. Although no one can be happy with trends in U.S. labor productivity — witness the first estimates for 1986, which show a rise of just 0.7% economywide and 2.7% in manufacturing — labor costs, by and large, are not generating a major push on total costs. Gains in adjusted hourly earnings continue on a modestly downward trend (see Chart 6). Standard explanations stress the decline in union power and representation; deregulation in such fields as transport, telecommunications, and finance; and the spread of flexible work practices, especially through contracted-out and part-time employment. While the dollar was rising, its strength was seen as a direct discipline on U.S. wage behavior and profit margins. Despite the dollar's now two-year-old slide, the discipline lives on. Consciousness of global competition has taken hold among U.S. management and labor. It will remain potent as long as import penetration remains anywhere near present levels.

Can sustained U.S. wage moderation be taken for granted? One worry comes if protection from imports becomes too readily available: formal and informal protection of the U.S. automobile industry during the 1980s seems to have held back productivity improvement and has sustained wages at uncompetitive levels, as has been true for a much longer period in steel. A second concern stems from the celebrated success of the U.S. economy in job creation. At 6.7%, the U.S. unemployment rate now lies within the zone of contention as to just where the U.S. NAIRU — the nonaccelerating inflation rate of unemployment — now stands. The 1970s' experience encouraged the pessimistic view that the U.S. NAIRU had risen to 7%. Recent evidence, principally associated with a more experienced and skilled labor force, suggests the rate has fallen in the 1980s, to 6% or even 4.5% by OECD estimates.

It would be rash to expand U.S. economic activity so much as to mop up all unemployment above the most favorable reading of the NAIRU. The inflationary risk would be all the greater if other industrial countries were simultaneously to boost their own economic growth. Near-term goals for U.S. real GNP growth therefore should not be pressed materially above the 2.5% pace that has proven consistent with both a gradual fall in unemployment and continuing wage moderation. Provided this moderation is maintained, the relative price adjustments essential to a competitive U.S. position in world trade can be completed with only temporary upward pressure on U.S. inflation.

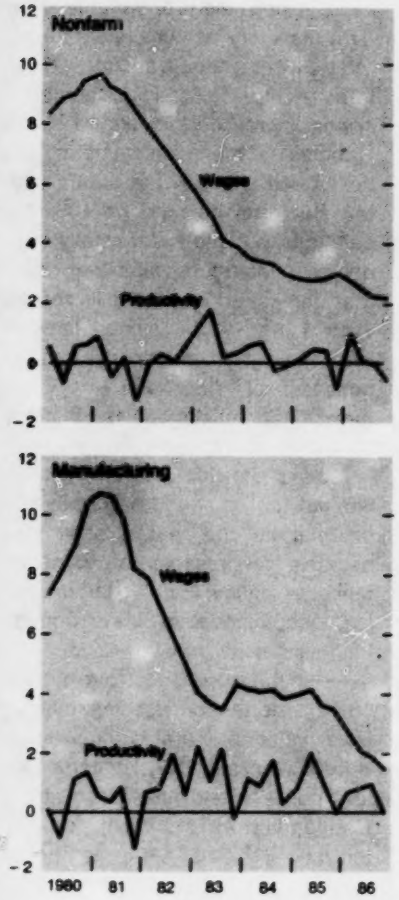
The twin U.S. deficits and economic growth

Anxieties about an inflationary hard landing may underlie arguments that the dollar should be stabilized. From here on, it seems, boosting national competitiveness in the sense of productivity growth and reducing the federal budget deficit are to form the U.S. contribution to global international adjustment. Stepped-up U.S. productivity growth is obviously in the interest of improving long-term living standards and could mitigate the pain of trade adjustment. But there should be no illusion that productivity growth will

Chart 6

U.S. wages and productivity

percent change from preceding year



of itself work quick miracles for the trade balance.

In fiscal policy, there is little doubt that the U.S. posture has already assumed a restrictive course. The federal deficit for the first four months of the current fiscal year came in $40 billion less, at an annual rate, than in the year-earlier period. A fairly conservative assessment of budgetary actions already in place or in the works would put the likely 1987 calendar-year deficit at $170 billion, 3.8% of GNP and a full percentage point below last year's.

The fiscal implications for the U.S. trade deficit are less certain, contrary to the widespread catechism of one-to-one connection. The catechism flows from the accounting identity that the current account surplus or deficit equals the excess or deficiency of domestic private and public saving relative to domestic investment. Reduced public dissaving through budget deficit reduction therefore shrinks a current account deficit, provided the balance of *domestic private* saving and investment remains unchanged.

Nonetheless the self-evident relationship so often asserted turns out anything but simple and predictable in practice — and is not at all guaranteed to be positive. The fiscal balance is not the sole arbiter of the external balance, nor should it be overlooked that the fiscal posture exerts powerful influence on economic activity generally and saving and investment specifically — and thereby on economic growth. Of course, saving, investment, and growth also are affected by domestic monetary policy, both monetary and fiscal policies abroad, and events that may be beyond policy control, such as terms of trade shocks and, to a major extent, exchange rate movements. Accordingly, if fiscal contraction is to succeed in reducing a current account deficit *without* depressing economic growth, there must be an offset from other macroeconomic policies either at home or abroad. The appropriate degree of domestic monetary relaxation will be contingent on foreign macroeconomic policies and performance. Adjustment of policies abroad may have much to contribute to a mutually constructive, growth-promoting resolution of international imbalances.

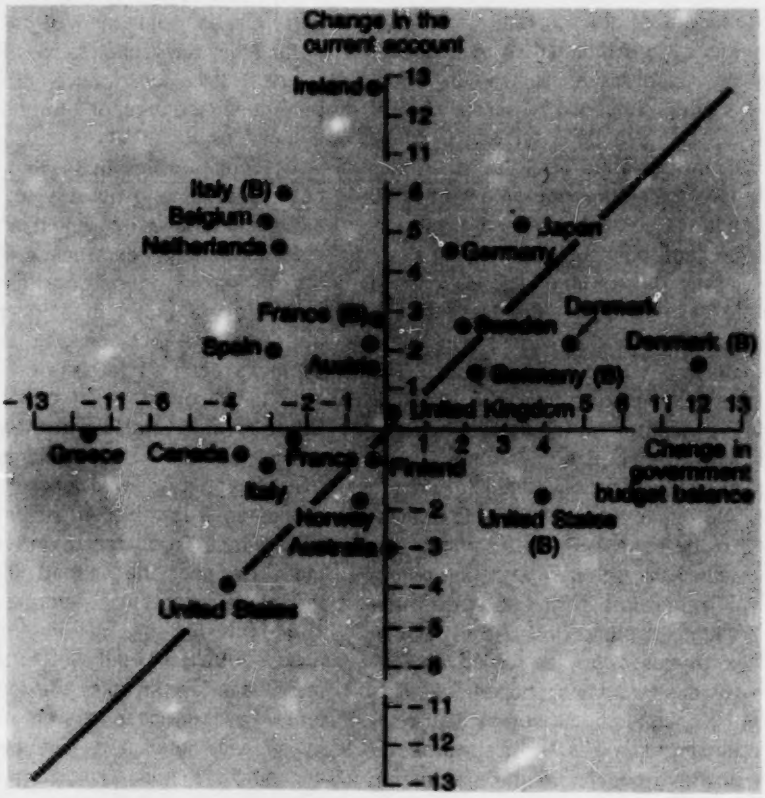
The complexities in the link between budget and current account adjustment are richly evident in both U.S. and foreign experience. Over the 1979-1986 period, as link enthusiasts are quick to emphasize, the U.S. fiscal and current account balances each shifted sharply into deficit, by some 4% of GNP. But Chart 7 demonstrates that the one-to-one positive U.S. association over this period was only rarely replicated elsewhere in the industrial world. True, Japan and Germany fall near the dashed line in the chart, expressing approximate one-to-one linkage. But in several cases — Belgium, the Netherlands, and Spain, for example — fiscal and current account changes were negatively associated. In Greece, a widening of the fiscal deficit by over 11% of GNP left the current account balance completely unaffected. Ireland's current account strengthened by over 12% of GNP, with practically no fiscal improvement. Furthermore, as the chart shows by selected examples from the 1970s, for a number of countries — including the United States — the direction of fiscal/external balance association has been unstable.

Looking more closely at past U.S. experience, in 1975 the current account attained a record surplus in terms of GNP (see Table 9), not least because of the steep, post-oil-shock recession and correspondingly low import demand. Yet the general government budget deficit — which covers federal, state, and

Chart 7

Budget and current account balances

as percent of GNP
*1978-86**



*The points plotted are the changes (from beginning to end of period) in the ratio of current account and general government balances to GNP. A plus sign indicates a move toward surplus. Earlier periods are shown for countries followed by (B). They are: 1974-78 for United States and Italy; 1974-79 for Denmark and France.

local results — ballooned to over 4% of GNP. U.S. fiscal policy then was tightened: the cyclically adjusted budget balance moved toward surplus by 1% of GNP in 1976 and cumulatively by almost 3% through 1978. Despite the fiscal tightening, U.S. economic activity and income growth recovered and the current account deteriorated in 1977-78 to what were then record deficits.

The explanation for this episode of negative linkage between U.S. fiscal and current account trends lies principally in the Federal Reserve's monetary policy, which turned unintentionally easy toward the end of Arthur Burns' tenure. Although nominal interest rates rose, giving the appearance of a tight monetary posture, real interest rates were negative from 1976 through late 1978. Total domestic saving increased, thanks to rising incomes in the private sector and deficit reduction in the public sector. But total demand on U.S. capacity grew rapidly, especially from domestic sources, with the result that domestic investment increased even faster than saving. Imports rose strongly, but exports less so because of the relatively slow growth of domestic demand in other industrial countries.

Thus, a shortfall in foreign growth worked to compound a U.S. fiscal/external linkage that already was negative for reasons of domestic monetary policy. Had the latter been less accommodative, lower domestic investment growth would likely have engendered better current account performance, accompanied by lower inflation and a stronger dollar — but lower real GNP. Tighter monetary policy would have been amply justified in 1978, when capacity utilization hit 87.5% (as noted earlier, it is under 80% today). In the event, decisive monetary restraint was deferred until 1979. In conjunction with a weaker dollar and a pickup in foreign economic growth, this monetary restraint produced a current account surplus by 1980 — and without fiscal contraction.

Italy's 1974-78 experience likewise merits recall. Although its budget and current account balances moved in the same direction at times, for the period as a whole they moved oppositely. In 1974 the lira became overvalued. The current account deficit shot up to 4.7% of GNP in response to rapid eco-

Table 9

Saving, investment, and current account

percent of GNP (GDP for Italy)

	Current account	Domestic saving: Total	Domestic saving: Budget balance	Domestic investment
United States				
1975	1.1	14.9	—4.1	13.7
1978	—0.5	18.2	—0.0	18.6
Italy				
1974	—4.6	21.9	—7.0	26.6
1978	2.4	22.4	—9.7	20.0
Japan				
1979	—0.9	31.5	—4.8	32.5
*1986**	4.4	32.1	—1.5	27.7

*Estimated.

nomic growth, exploding wages, and the run-up of oil and other commodity prices — yet the budget deficit increased hardly at all. At creditors' insistence, Italy's short-term interest rates were raised to over 20% in June 1974 and taxes by 2.5% of GNP soon after. In 1975 the levels of real GNP plummeted by 3.5% and industrial production by over 9%, inflation halved by mid-year, and the current account deficit almost disappeared. But the fiscal/external link turned out negative. Contrary to the current account improvement, the budget deficit rose from 7% of GNP in 1974 to 11.7% in 1975, reflecting both recession and the deliberate fiscal expansion undertaken that August. This expansion helped precipitate another exchange crisis in January 1976. Both monetary and fiscal restraint were reapplied and the current account swung into surplus in 1977-78. This time, the fiscal/external link turned out positive, but there was strong simultaneous support from monetary policy, a sharp depreciation of the lira, and quickening economic growth in export markets.

Although Japan's post-1979 experience suggests a one-to-one positive association between fiscal restraint and current account improvement, it also demonstrates the critical importance of external factors. Between 1979 and 1986, Japan's cyclically adjusted budget balance contracted by 4% of GNP and the current account soared into outsize surplus. Net export strength allowed Japan's real GNP growth to exceed that of domestic demand for seven consecutive years. From early 1983 through mid-1985, exports to the United States accounted for an astonishing 40% plus of Japan's real GNP growth, rocketing over 100% in real terms. More recently, with the slowdown in U.S. demand and a stronger yen both hitting exports, Japan is feeling the negative consequences of fiscal restriction full force. Present budget policies point to a further fiscal contraction this year, by a cyclically adjusted 0.6% of GNP — despite ever-weakening growth prospects. Unless a large supplementary budget is swiftly enacted, or Japan's export markets grow unexpectedly fast, 1987 is likely to see a further reduction in the budget deficit in conjunction with a diminished external surplus — a negative link.

In assessing the value of fiscal restraint for tackling today's U.S. external imbalance, it is vital to digest the lessons from the U.S., Italian, and Japanese experiences just cited. These make clear that external factors and domestic monetary policy are crucial in determining not only the current account payoff from fiscal restraint but also its cost in terms of economic growth. The external factors facing the United States are less than propitious. Barring major policy changes abroad, of which the G-5 communiqué provides scant promise, real GNP growth in other industrial economies is likely to remain anemic. The dollar's depreciation to date should shore up U.S. global market share somewhat. But, in view of its concern about further dollar erosion, the Federal Reserve cannot be relied upon to ease monetary policy and offset the recessionary implications of fiscal tightening. In all, even if U.S. fiscal restraint helps narrow the trade deficit, it is an open question whether this will occur without detriment to U.S. and global economic growth.

G-5 at sixes and sevens?

The G-5's February pronouncement merits support in two important particulars: the recognition that international trade imbalances pose serious risks; and the judgment that

enduring exchange rate stability will be a product of supportive fundamentals, not central bank intervention or target zones.

But the G-5 revealed itself at sixes and sevens, not only in the matter of Canadian and Italian participation, but, more importantly, in its professed view of the fundamentals — that actions to date and promised have already brought the fundamentals sufficiently into place to warrant exchange rate stability around current levels for the major currencies. With world economic growth stumbling and LDC financing issues once again on the boil, complacency is not in order. To stabilize the dollar too long at present levels risks higher U.S. interest rates, U.S. recession, and renewed world deflation. This describes the hard landing that everyone hopes to avert, not the maintenance of the soft landing that is so clearly in the general interest.

Of course, it is tempting to procrastinate. The ease of financing the U.S. current account deficit so far — thanks to a world of integrated capital markets, ample liquidity, and an abundance of savings seeking attractive investment outlets — suggests the deficit can be financed for quite some time ahead. In addition, more rapid adjustment could harm those many countries — Japan, Korea, and Taiwan, to name but a few — that have relied excessively on exports to the United States for economic growth at home; even some U.S. exporters are worrying about an eroding ability of foreign customers to purchase U.S. products. Besides, it will be said that the United States has more certain or better ways than dollar depreciation to tackle the trade deficit: for example, by protectionist trade legislation, measures to strengthen productivity and competitiveness, and — most of all, to many minds — by fiscal rectitude. Yet, U.S. actions alone, as the body of this article has demonstrated, are unlikely to yield a swift and adequate result, and indeed risk the opposite.

Since international imbalances are every bit as dangerous as the Group admits, they need to be tackled as a matter of *urgency*. Concrete policy changes are required of a kind and degree that offer convincing promise of accomplishing a satisfactory resolution of the imbalances, not merely their token alleviation. Thus the U.S. trade deficit needs not just to be steered onto a declining trend but to be cut back by $100 billion per annum, with commensurate implications for the surplus countries. No commitment to prompt policy changes adequate to this end is to be found in the G-5 communiqué, nor in more recent official policy expositions.

The U.S. trade deficit is an intrinsically *international* issue. Not only is the scale of the problem beyond the unaided grasp of even the world's number one economy, but also the problem originates less in expansionary U.S. policies than in lagging growth in other industrial economies, biased growth in the Asian NICs, prolonged currency misalignment, and the LDC debt problem. A balanced international approach recognizes these multiple sources of the U.S. trade problem and urges steps to tackle all, without disproportionate weight on any single target. As is by now familiar, such an international approach looks to contributions from the United States, in the form of fiscal restraint; from other industrial countries and the Asian NICs, through expansionary domestic policies; and from exchange rate adjustment to handle that major part of the job that cannot sensibly be accomplished by twisting the differential between U.S. and foreign economic growth. Regrettably, after two years of fruitless prodding of Japan and

Germany to put aside their mercantilist or nationalist traditions and come to terms with their growth and adjustment responsibilities, it becomes questionable whether much good will come of efforts to coordinate actions internationally.

While continuing to pursue the international approach, the United States should now move ahead forcefully *on its own.* First, productivity and competitiveness initiatives, including efforts to open up export markets abroad, may have much to commend them for alleviating the stress on domestic living standards inherent in trade deficit correction and for strengthening long-term U.S. economic performance generally. But the near-term benefit for U.S. trade would be marginal since the imbalance is fundamentally a macroeconomic phenomenon. Second, on the fiscal front, the United States should stick to the gradualist profile now in the works for federal deficit reduction, buying genuine spending restraint with modest consumer imposts on such items as alcohol, tobacco, and gasoline, totaling $10-$20 billion. Third, to alleviate the contractionary fiscal influence on U.S. economic growth, Federal Reserve policy should provide positive offset. The risk that careful monetary easing will unleash inflation is a lesser concern than that of inadequate U.S. economic growth and trade adjustment. As the U.S. policy mix shifts, the dollar should be allowed to fall, perhaps by as much as 15% on the *broad* effective index.* This should be welcomed as a tool to force more adequate U.S. trade and current account adjustment. The extra dose of dollar depreciation would erode the exports of surplus countries and demonstrate, through reality rather than exhortation, that their domestic policies need overhaul. The more they ultimately beef up their domestic growth, the less their currencies will need to rise.

In sum, the United States needs to be crystal clear, both to itself and to trade partners, about one of its most urgent national objectives: to bring down its trade deficit by at least $100 billion before the end of this decade, with minimal resort to protectionism and without precipitating recession at home or abroad. At this stage, until such time as the requisite changes in macroeconomic policies are well in hand, overemphasis on long-term dollar stabilization would distract from the fundamental adjustment objective. Clarity and determination on these points should help preserve confidence and improve the chances that the further fall in the dollar that is a key ingredient of successful adjustment will not provoke a hard landing. By contrast, obfuscation and procrastination can only undermine confidence. Worse, they heighten the risks that the world economy will fall victim to the resurgent tide of protectionistic nationalism now evident in Japan, Europe, and a number of the LDCs — and, not least, in the United States itself.

*A decline of this magnitude cannot be accomplished solely by pressuring the Asian NICs and Canada to revalue on the grounds that their currencies have barely participated in the overall adjustment of the dollar so far and, in the case of the NICs, that they are running huge current account surpluses. Even if, at the extreme, one hypothesizes revaluations against the dollar of 40% for the NICs' currencies and 8% for the Canadian unit, the yen and the European currencies still would need to rise 10% or more. It should be noted that the dollar remains above the levels of Y130 and DM1.55 that would replicate today the purchasing power relationships that prevailed in the fall of 1978. Moreover, since U.S. inflation is projected to run higher over the next few years than in Japan and Germany, further nominal dollar depreciation will be needed just to maintain the present level of U.S. competitiveness.

Statistical appendix

For key to data in tables see pages 22 and 23.

Effective exchange rates — industrial countries, 14

Real effective exchange rates — developing countries, 15

International banking market size, 15

International bond issues and bank credits, 16

Eurocurrency deposit rates, 17

International bond yields, 17

Central bank discount rates, 18

Day-to-day money rates, 18

Treasury bill rates, 19

Representative money market rates, 19

Commercial bank deposit rates, 20

Domestic government bond yields, 20

Commercial bank lending rates to prime borrowers, 21

Domestic corporate bond yields, 21

Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates — industrial countries

Index numbers, 1980-82 average=100.

	United States	Canada	Japan	Australia	France	Germany	Italy	United Kingdom	Austria	Belgium	Neth-erlands	Spain	Swit-zerland	Den-mark	Norway	Swe-den
Nominal against 15 other industrial-country currencies																
1981	99.5	100.2	105.8	104.0	100.4	97.2	98.8	102.1	98.9	101.8	97.1	99.4	98.3	99.2	100.1	103.3
1982	109.8	99.4	98.6	100.1	93.1	102.8	92.8	98.1	101.7	92.3	102.7	94.1	106.3	95.7	101.7	92.8
1983	114.2	100.8	107.8	92.0	87.3	107.6	90.3	91.6	103.6	90.0	105.0	76.4	111.5	96.4	99.4	82.2
1984	122.4	97.3	113.0	94.2	84.4	107.4	86.7	88.1	103.6	88.9	104.0	77.4	110.5	93.9	97.8	84.3
1985	127.1	92.8	115.8	76.3	85.4	107.8	82.1	88.2	104.2	89.5	104.0	75.6	109.5	95.0	95.6	83.9
1986	106.0	87.6	150.1	61.4	87.4	116.1	82.9	80.7	107.8	92.9	110.3	73.4	118.1	99.7	89.3	81.6
1986																
September	102.2	87.1	160.8	55.1	86.5	118.3	83.9	77.5	108.5	93.8	112.0	73.7	122.7	100.5	86.6	81.0
October	102.1	87.0	158.4	56.8	87.3	119.4	84.4	74.4	109.0	94.3	112.9	73.4	122.3	102.1	85.9	80.8
November	103.5	87.4	152.7	58.1	87.4	119.5	84.4	75.1	109.1	94.2	112.9	72.6	120.4	102.1	84.7	80.8
December	102.5	87.6	152.4	59.0	87.5	120.2	84.6	75.0	109.4	94.5	113.3	72.6	120.2	102.5	83.9	80.5
1987																
January	98.5	88.1	156.1	57.2	87.4	122.2	84.0	74.8	110.4	95.9	114.9	71.9	121.7	103.9	83.8	79.9
February	69.9	89.7	156.4	57.2	87.9	122.7	83.9	74.8	110.7	96.4	115.0	71.3	121.4	104.6	84.4	80.0
January 30	96.6	89.0	157.3	56.5	87.9	123.0	84.1	74.5	110.8	96.5	115.4	71.0	122.3	104.7	84.0	79.7
February 6	96.8	89.8	156.7	57.1	87.8	122.7	83.9	74.4	110.7	96.5	115.2	71.2	121.7	104.6	84.5	79.9
13	96.9	89.2	156.5	57.1	88.8	122.8	84.0	74.4	110.8	96.6	115.2	71.2	121.5	104.9	84.5	79.9
20	96.9	89.9	156.2	57.0	87.8	122.6	83.9	75.0	110.7	96.4	114.9	71.4	121.2	104.7	84.7	80.1
27	96.8	89.6	156.3	57.6	87.7	122.4	83.8	75.8	110.6	96.2	114.7	71.3	121.3	104.5	84.4	80.3
March 6	96.7	89.7	156.1	58.0	87.5	122.0	83.5	77.2	110.4	95.9	114.4	71.2	121.1	104.2	84.7	80.5
Real against 15 other industrial-country currencies																
1981	100.8	99.5	104.6	102.6	100.0	96.9	98.9	102.5	99.4	101.4	97.1	99.6	98.7	98.9	101.3	101.9
1982	109.3	100.6	92.4	105.7	97.3	99.9	96.5	98.8	101.2	91.9	100.5	99.0	103.0	97.9	103.2	95.6
1983	112.7	102.6	96.8	101.9	94.7	101.0	101.1	93.1	102.0	88.6	100.8	88.9	105.1	100.4	102.0	90.7
1984	119.6	100.2	97.8	106.4	97.0	98.0	101.8	90.2	103.0	85.9	97.8	91.1	100.1	99.2	100.5	96.0
1985	122.5	96.5	96.6	89.5	100.5	96.7	100.2	92.8	103.3	85.3	96.6	92.5	98.0	101.2	99.5	96.9
1986	101.6	93.4	119.3	78.6	102.6	103.6	103.0	87.5	106.7	84.7	101.5	94.5	105.8	107.6	97.1	96.1
1986																
September	97.5	93.6	126.7	72.4	102.4	105.3	104.2	84.5	107.0	84.5	102.7	95.1	110.2	108.8	96.6	95.8
October	97.8	93.7	124.3	74.2	103.6	105.9	105.0	81.0	107.3	84.6	104.4	94.7	110.2	110.5	96.4	95.5
November	99.2	94.0	119.4	76.7	102.8	105.8	105.4	81.9	107.5	84.7	104.7	95.1	108.2	110.4	95.8	95.9
December	98.2	94.2	119.1	79.0	102.2	106.4	105.8	82.2	108.1	84.5	104.9	95.8	108.5	110.8	94.3	96.0
1987																
January	94.7	94.6	121.0	77.3	102.3	106.4	105.6	82.3	109.7	85.7	104.6	95.6	109.0	111.8	94.4	96.0
February	92.9	97.0	120.7	77.8	102.8	106.7	105.4	82.6	109.8	85.6	105.0	95.4	108.6	113.2	94.9	96.5
Real against 18 other industrial-country and 22 LDC currencies																
1981	99.8	99.4	104.7	102.5	99.5	96.2	98.2	102.0	98.9	100.9	96.6	98.9	98.0	98.7	101.3	101.6
1982	109.6	101.8	94.0	105.2	96.9	99.4	98.1	98.5	101.1	91.6	99.5	98.9	102.6	97.7	103.0	95.4
1983	114.9	104.6	100.4	102.1	94.4	100.6	100.8	93.0	102.1	88.2	99.5	89.2	105.1	100.3	101.9	90.9
1984	120.8	102.7	102.4	106.7	96.4	96.8	101.0	89.7	102.7	85.0	95.9	91.3	99.8	99.0	100.5	95.7
1985	124.0	99.2	101.6	90.1	100.0	95.8	99.8	92.3	102.9	84.5	94.8	93.2	97.8	101.2	99.8	96.8
1986	107.3	94.6	124.2	80.7	103.3	104.7	104.5	88.4	107.5	85.3	101.5	97.0	107.6	108.1	98.0	96.8
1986																
September	104.0	94.4	131.9	75.0	103.3	106.9	106.0	85.7	108.2	85.3	103.1	98.0	112.7	109.6	97.6	96.8
October	104.3	94.6	129.7	76.6	104.7	107.8	107.1	82.3	108.7	85.6	105.0	97.7	113.0	111.3	97.4	96.6
November	105.5	95.0	124.6	78.8	103.8	107.7	107.4	83.2	108.9	85.7	105.3	98.1	110.9	111.2	96.7	96.9
December	105.0	95.3	124.6	81.3	103.4	108.5	108.0	83.6	109.6	85.5	105.6	98.2	111.3	111.6	95.3	97.0
1987																
January	101.6	95.3	125.9	79.7	103.6	110.9	106.1	83.9	111.4	86.9	105.7	99.1	112.2	112.7	95.5	97.2
February	100.4	97.8	125.8	80.3	104.3	111.5	106.3	84.4	111.7	87.0	106.3	99.3	112.1	114.3	96.0	97.9

Real effective exchange rates — developing countries

Index numbers, 1980-82 average=100.

	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Venezuela	Hong Kong	Indonesia	Korea	Malaysia	Philippines	Singapore	Taiwan	Israel	Turkey
1981	107.8	103.3	108.3	100.6	114.4	103.3	99.7	98.9	99.8	100.3	99.4	101.2	102.0	101.8	99.3	104.7
1982	77.0	112.9	97.3	105.9	82.9	104.6	110.2	101.6	111.7	101.9	105.6	106.7	100.8	96.6	106.6	96.0
1983	71.5	86.2	89.2	104.9	78.8	96.4	117.2	95.8	96.2	97.6	113.9	96.1	101.8	94.5	120.8	93.5
1984	80.1	85.7	90.1	99.6	91.8	105.8	86.0	100.2	96.8	96.5	119.7	107.9	102.4	97.1	119.5	91.1
1985	71.2	85.1	79.7	85.7	90.5	96.3	93.0	104.2	95.8	89.2	116.3	114.6	95.7	94.6	106.8	91.5
1986	61.0	74.5	68.7	67.8	65.1	93.8	87.1	94.0	71.2	73.9	94.2	90.3	80.2	87.3	101.0	71.2
1986																
March	62.0	75.2	67.1	70.7	68.3	90.5	89.1	94.5	80.5	76.9	97.6	91.4	82.7	86.8	99.0	74.4
April	61.8	73.6	66.5	70.1	66.7	90.8	89.7	95.5	80.1	76.6	94.6	89.9	80.9	88.7	100.7	71.9
May	60.8	72.8	66.6	68.1	65.7	90.6	89.8	95.2	78.9	75.1	92.9	88.4	79.1	88.4	101.5	71.4
June	61.3	73.1	70.3	67.8	66.7	92.0	90.2	96.2	79.1	75.4	93.1	87.4	79.3	89.5	101.9	70.9
July	61.6	72.2	69.6	66.8	65.0	92.1	89.9	91.7	76.9	70.7	91.2	87.8	78.6	89.0	101.0	69.8
August	60.9	72.2	67.9	65.9	62.3	91.6	89.7	90.3	75.4	69.8	90.7	85.8	78.5	88.1	99.5	67.7
September	58.8	72.4	67.7	65.9	60.7	93.6	90.0	92.3	60.9	70.4	90.3	86.5	78.0	84.9	100.5	67.4
October	58.8	71.7	67.8	64.9	60.5	96.7	91.0	92.3	54.6	70.6	89.7	88.2	77.7	84.7	100.9	67.7
November	59.4	73.0	68.2	64.9	60.7	100.9	91.4	94.9	55.5	71.9	90.9	89.2	78.9	85.5	102.0	65.8
December	58.8	76.1	68.1	65.4	59.8	105.2	60.2	93.7	55.2	72.1	90.6	90.2	76.3	85.9	102.2	64.8
1987																
January	56.3	75.9	65.9	64.8	60.4	101.0	58.9	89.6	53.9	70.5	88.3	88.5	75.7	85.3	92.5	64.9
February	50.1	68.0	66.3	65.3	60.3	87.4	59.6	89.2	53.9	70.1	88.5	86.4	75.3	85.1	92.1	64.6

International banking market size

at end of period, billions of dollars

	1981	1982	1983	1984	1985			1986	
					Jun	Sep	Dec	Mar	Jun
Gross claims									
Eurocurrencies, on residents and nonresidents	**1 929**	**2 146**	**2 253**	**2 359**	**2 459**	**2 622**	**2 833**	**2 947**	875
On nonbanks	557	634	665	694	735	781	822	854	2 165
On banks	1 372	1 512	1 588	1 665	1 724	1 861	2 011	2 093	**3 040**
In dollars	1 504	1 694	1 797	1 894	1 924	2 002	2 101	2 138	2 166
In other currencies	425	452	456	465	535	620	732	809	874
Domestic currencies, on nonresidents	**365**	**398**	**398**	**402**	**422**	**451**	**508**	**535**	**578**
On nonbanks	128	132	136	142	150	165	187	186	201
On banks	237	266	262	260	272	286	319	349	377
In dollars	188	211	217	215	209	205	215	203	210
In other currencies	177	187	181	187	213	246	291	332	368
Total	**2 294**	**2 544**	**2 651**	**2 761**	**2 881**	**3 073**	**3 339**	**3 482**	**3 618**
On nonbanks	685	766	801	836	885	926	1 009	1 040	1 076
On banks	1 609	1 778	850	1 925	1 996	2 147	2 330	2 442	2 542
In dollars	1 692	1 905	2 014	2 109	2 133	2 207	2 316	2 341	2 376
In other currencies	602	639	637	652	748	866	1 023	1 141	1 242
Gross liabilities									
Eurocurrencies, to residents and nonresidents	**1 954**	**2 168**	**2 278**	**2 356**	**2 471**	**2 641**	**2 846**	**2 964**	**3 059**
To nonbanks	372	432	479	497	520	546	585	610	632
To official monetary institutions	112	91	88	96	106	109	112	106	109
To other banks	1 470	1 645	1 711	1 793	1 845	1 986	2 149	2 248	2 318
In dollars	1 539	1 741	1 846	1 950	1 969	2 045	2 147	2 166	2 204
In other currencies	415	427	432	436	502	596	699	798	855
Domestic currencies, to nonresidents	**263**	**250**	**260**	**280**	**310**	**341**	**377**	**394**	**418**
To nonbanks	74	70	73	80	89	103	114	121	121
To banks	189	180	187	200	221	238	263	273	297
In dollars	126	116	135	146	154	159	169	166	171
In other currencies	137	134	125	134	156	182	208	228	247
Total	**2 217**	**2 418**	**2 538**	**2 636**	**2 781**	**2 982**	**3 223**	**3 358**	**3 477**
To nonbanks	446	502	552	577	609	649	699	731	753
To banks and official institutions	1 771	1 916	1 986	2 089	2 172	2 333	2 529	2 627	2 724
In dollars	1 665	1 857	1 961	2 096	2 123	2 204	2 316	2 332	2 375
In other currencies	552	561	557	570	658	778	907	1 026	1 102
Net market size	**1 155**	**1 285**	**1 382**	**1 430**	**1 497**	**1 572**	**1 676**	**1 735**	**1 800**

International bond issues and bank credits

millions of dollars

	1984	1985	1986	1986 Nov	1986 Dec	1987 Jan	Jan 1987	Jan 1986
By country of borrower								
Industrial countries	**177 077**	**226 711**	**270 231**	**22 418**	**21 096**	**21 337**	**21 337**	**17 027**
Australia	5 816	14 407	20 106	2 094	774	1 122	1 122	3 012
Austria	2 254	2 435	3 581	178	121	657	657	291
Belgium	1 847	3 269	4 952	7	178	697	697	111
Canada	13 124	17 184	21 633	2 271	4 425	957	957	369
Denmark	4 825	3 589	9 633	1 263	1 526	1 647	1 647	61
Finland	1 713	1 846	3 445	260	422	504	504	199
France	11 296	18 773	19 701	1 688	1 864	1 110	1 110	644
Germany	2 165	3 452	11 927	1 412	324	2 162	2 162	211
Greece	1 551	1 567	1 317	20	143	—	—	—
Ireland	1 377	1 881	4 179	331	—	—	—	132
Italy	6 933	11 033	12 962	706	704	575	575	1 014
Japan	17 526	21 269	35 508	3 295	3 217	2 206	2 206	1 145
Netherlands	1 973	2 299	3 579	246	335	651	651	90
New Zealand	3 208	2 707	8 078	945	1 010	736	736	420
Norway	1 324	3 905	6 644	848	414	782	782	145
Portugal	1 796	2 382	2 433	25	31	215	215	587
South Africa	1 422	825	—	—	—	—	—	—
Spain	4 931	3 913	7 015	860	70	370	370	49
Sweden	11 256	9 890	8 020	368	120	527	527	639
United Kingdom	8 899	25 424	24 295	960	1 010	3 476	3 476	1 495
United States	65 054	69 193	56 774	4 022	4 051	2 084	2 084	6 002
*Other**	6 785	5 447	4 448	616	359	859	859	431
Developing countries	**39 725**	**32 139**	**24 317**	**1 638**	**2 467**	**507**	**507**	**1 242**
Latin American countries	**17 464**	**8 115**	**3 192**	**172**	**274**	**—**	**—**	**30**
Argentina	4 212	3 700	17	—	—	—	—	17
Brazil	6 849	—	219	19	150	—	—	—
Chile	784	1 085	—	—	—	—	—	—
Colombia	589	1 052	89	—	—	—	—	—
Mexico	3 918	109	313	—	—	—	—	—
Venezuela	—	48	—	—	—	—	—	—
*Other***	1 312	2 121	2 554	153	124	—	—	13
Asian countries	**15 893**	**18 410**	**15 291**	**1 120**	**1 699**	**407**	**407**	**1 009**
India	945	818	1 721	619	50	25	25	141
Indonesia	1 924	451	1 358	—	350	—	—	300
Korea	6 201	5 898	3 134	195	93	25	25	293
Malaysia	2 606	2 219	1 328	—	—	—	—	—
Philippines	925	925	—	—	—	—	—	—
Thailand	1 221	1 497	1 401	—	358	—	—	—
Other	2 072	6 602	6 350	306	849	357	357	276
Middle Eastern and African countries	**6 368**	**5 613**	**5 834**	**346**	**495**	**100**	**100**	**203**
Algeria	821	1 450	1 344	96	250	—	—	—
Nigeria	985	—	—	—	—	—	—	—
Turkey	741	1 203	2 637	140	220	—	—	138
Other	3 821	2 960	1 853	108	25	100	100	65
Eastern European countries	**3 244**	**5 236**	**4 091**	**—**	**300**	**—**	**—**	**298**
Hungary	1 386	1 577	1 315	—	—	—	—	248
Soviet Union	1 051	1 489	1 821	—	300	—	—	—
*Other****	807	2 169	955	—	—	—	—	50
International organizations****	**13 287**	**20 635**	**18 916**	**1 451**	**1 991**	**2 261**	**2 261**	**2 088**
By type of instrument and currency								
International bond issues	**107 411**	**167 756**	**226 393**	**18 214**	**13 862**	**17 998**	**17 998**	**14 061**
Eurobonds	79 458	136 731	187 952	14 944	9 758	14 707	14 707	11 179
U.S. dollar	63 593	97 782	118 220	9 445	5 979	5 365	5 365	7 570
German mark	4 604	9 491	16 870	1 002	298	2 955	2 955	1 052
British pound	3 997	5 766	10 510	—	346	1 069	1 069	289
Japanese yen	1 212	6 539	18 673	1 470	1 860	1 603	1 603	1 036
European composite units	3 032	7 038	6 965	842	615	1 909	1 909	464
Other	3 020	10 114	16 713	2 185	859	1 806	1 806	768
Foreign bonds	27 953	31 025	38 441	3 270	4 105	3 291	3 291	2 882
U.S. dollar	5 487	4 655	6 064	700	1 600	450	450	914
German mark	2 243	1 741	—	—	—	—	—	—
British pound	1 292	958	322	—	—	—	—	—
Swiss franc	12 626	14 954	23 401	1 974	1 747	2 338	2 338	1 334
Japanese yen	4 626	6 379	4 758	236	449	246	246	321
Other	1 677	2 339	3 898	361	309	257	257	313
International bank credits	**125 922**	**116 964**	**91 164**	**7 293**	**11 993**	**6 107**	**6 107**	**6 595**
Eurocurrency credits	112 605	110 317	82 755	6 758	11 105	5 616	5 616	6 231
Foreign credits	13 317	6 647	8 409	535	888	492	492	364
Total	**233 333**	**284 720**	**317 556**	**25 507**	**25 855**	**24 106**	**24 106**	**20 656**

*Includes multinational organizations. **Includes unallocated. ***Includes COMECON institutions. ****Includes regional development organizations.

Eurocurrency deposit rates

prime banks' bid rates, at or near end of month

	1983	1984	1985	1986					1987	
	Dec	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Eurodollar										
overnight	9.50	8.63	12.25	5.88	5.88	5.75	6.06	22.00	6.00	5.87
one month	9.69	8.38	8.00	5.69	6.00	5.81	6.25	6.50	6.06	6.31
three months	9.81	8.63	7.88	5.56	6.00	5.81	6.00	6.25	6.12	6.31
six months	10.06	9.13	7.88	5.56	6.00	5.81	5.94	6.12	6.12	6.31
twelve months	10.38	9.81	7.94	5.69	6.19	5.88	6.00	6.12	6.12	6.37
Euro-Canadian dollar										
one month	9.13	9.88	9.00	8.06	7.94	8.06	8.19	8.00	7.37	7.12
three months	9.50	10.81	9.00	8.13	8.19	8.31	8.31	8.12	7.37	7.25
six months	9.75	10.06	9.00	8.50	8.50	8.50	8.19	8.19	7.37	7.44
twelve months	10.00	10.44	9.00	8.63	8.75	8.69	8.56	8.31	7.50	7.62
Euro-French franc										
one month	12.13	10.69	12.50	7.13	7.38	7.38	7.56	10.12	8.81	8.31
three months	12.19	10.69	13.00	7.25	7.88	7.19	8.19	10.37	8.87	8.44
six months	12.31	11.00	13.13	7.31	7.75	7.88	8.37	9.75	8.81	8.44
twelve months	12.63	11.38	12.25	7.38	8.63	7.88	8.37	8.75	8.81	8.44
Euromark										
one month	5.25	5.50	4.75	4.44	4.50	4.44	4.69	5.12	4.00	3.94
three months	5.88	5.50	4.75	4.31	4.50	4.50	4.62	4.87	4.12	4.00
six months	6.13	5.56	4.75	4.31	4.56	4.56	4.69	4.81	4.12	4.00
twelve months	6.38	5.56	4.81	4.31	4.63	4.63	4.69	4.81	4.19	4.12
Euro-Dutch guilder										
one month	5.81	5.69	5.75	5.25	5.31	5.31	5.81	6.31	5.44	5.31
three months	6.00	5.75	5.75	5.13	5.25	5.31	5.69	6.00	5.31	5.31
six months	6.25	5.81	5.81	5.06	5.25	5.31	5.56	5.87	5.19	5.25
twelve months	6.38	5.94	5.88	5.06	5.25	5.31	5.56	5.81	5.19	5.25
Euro-Swiss franc										
one month	3.38	4.44	3.88	4.19	3.81	2.94	3.87	3.94	3.25	4.19
three months	3.75	4.56	4.00	4.13	4.06	3.75	3.87	3.94	3.19	3.94
six months	3.94	4.63	4.00	4.13	4.06	3.75	3.87	3.87	3.31	3.87
twelve months	3.94	4.69	4.06	4.13	4.06	3.81	3.87	3.87	3.62	3.94
Eurosterling										
one month	9.13	9.50	11.69	10.00	10.50	10.81	11.06	11.12	11.06	11.12
three months	9.31	9.88	11.81	9.81	10.19	11.13	11.37	11.12	11.00	10.69
six months	9.50	10.00	11.81	9.63	10.75	11.13	11.37	11.06	10.87	10.37
twelve months	9.81	10.19	11.69	9.56	10.81	11.06	11.37	11.06	10.75	10.31
Euroyen										
one month	6.25	6.19	7.13	5.13	4.94	4.25	4.62	4.56	4.37	4.56
three months	6.31	6.19	6.56	4.75	4.88	4.56	4.50	4.50	4.25	4.25
six months	6.38	6.13	6.50	4.63	4.88	4.56	4.50	4.37	4.12	4.12
twelve months	6.44	6.13	6.38	4.63	4.88	4.56	4.50	4.31	4.06	4.06
European currency unit										
one month	8.81	9.25	9.63	7.25	7.25	7.44	7.56	8.56	7.62	7.44
three months	9.19	9.38	9.63	7.06	7.25	7.56	7.62	8.44	7.56	7.44
six months	9.44	9.50	9.63	6.88	7.25	7.50	7.62	8.06	7.50	7.44
twelve months	9.63	9.63	9.63	6.88	7.25	7.50	7.56	7.31	7.50	7.37

International bond yields

average yield of several actively traded, high quality issues with a maturity of 7 to 12 years
at or near end of month

	1984	1985	1986						1987	
	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States companies										
Eurodollar	11.25	9.68	8.97	8.60	9.04	8.76	8.71	8.67	8.70	8.71
Euromark	6.95	6.73	6.55	6.55	6.73	6.66	6.63	6.62	6.64	6.60
Swiss franc	5.73	5.49	5.56	5.63	5.65	5.67	5.73	5.70	5.67	5.64
European governments										
Eurodollar	12.04	10.52	9.97	9.73	9.92	9.85	9.81	9.91	9.85	10.03
Euromark	7.39	7.03	6.81	6.64	6.63	6.78	6.88	6.77	6.64	6.70
Swiss franc	5.24	4.91	4.73	4.66	4.61	4.57	4.58	4.51	4.40	4.35
European currency unit	10.64	10.23	10.02	10.17	10.23	10.49	10.55	10.20	10.38	10.37

Central bank discount rates

at or near end of month

	1983	1984	1985	1986			1987		Current	
	Dec	Dec	Dec	Oct	Nov	Dec	Jan	Feb	Mar 12 1987	effective since
United States	8.50	8.00	7.50	5.50	5.50	5.50	5.50	5.50	5.50	Aug 21, 86
Canada	9.96	10.09	9.49	8.55	8.49	8.47	7.49	7.53	7.28	Mar 12, 87
Austria	3.75	4.50	4.00	4.00	4.00	4.00	3.50	3.50	3.50	Jan 23, 87
Belgium	10.00	11.00	9.75	8.00	8.00	8.00	8.50	8.50	8.00	Mar 12, 87
Denmark	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	Oct 27, 83
Finland	9.50	9.50	9.00	7.00	7.00	7.00	7.00	7.00	7.00	May 19, 86
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	4.00	4.50	4.00	3.50	3.50	3.50	3.00	3.00	3.00	Jan 23, 87
Ireland	12.25	14.00	10.25	13.25	13.25	13.25	13.25	13.25	13.25	Oct 24, 86
Italy	17.00	16.50	15.00	12.00	12.00	12.00	12.00	12.00	12.00	May 27, 86
Netherlands	5.00	5.00	5.00	4.50	4.50	4.50	4.50	4.50	4.50	Mar 7, 86
Norway	8.00	8.00	8.00	8.00	8.00	8.00	n.a.	n.a.	n.a.	Jun 6, 83
Portugal	25.00	25.00	19.00	14.50	14.50	16.00	15.50	15.50	15.50	Jan 7, 87
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	8.50	9.50	10.50	7.50	7.50	7.50	7.50	7.50	7.50	Sep 19, 86
Switzerland	4.00	4.00	4.00	4.00	4.00	4.00	3.50	3.50	3.50	Jan 22, 87
United Kingdom	9.00	9.38	11.31	10.81	10.81	10.81	10.81	10.81	10.37	Mar 9, 87
Japan	5.00	5.00	5.00	3.50	3.00	3.00	3.00	2.50	2.50	Feb 23, 87
New Zealand	7.50	13.50	19.80	16.50	19.80	24.60	n.a.	n.a.	24.60	Dec, 86
South Africa	16.50	21.75	13.50	10.50	10.50	10.00	10.00	10.00	10.00	Dec 10, 86
Argentina*	15.10	18.19	5.00	10.59	10.59	11.19	11.53	10.76	10.76	Feb 1, 87
Korea	5.00	5.00	5.00	7.00	7.00	7.00	7.00	7.00	7.00	Jul 10, 86
Philippines	8.05	12.11	11.50	9.77	9.74	n.a.	n.a.	n.a.	9.74	Nov, 86
Singapore	7.00	6.75	5.00	5.00	5.00	5.00	5.00	5.00	5.00	Jul, 85
Thailand	13.00	12.00	11.00	8.00	8.00	8.00	8.00	8.00	8.00	Sep 1, 86
Venezuela	11.00	11.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	Mar, 85

*Percent per month.

Day-to-day money rates

monthly averages

	1983	1984	1985	1986						1987	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	9.47	8.38	8.27	6.55	6.16	5.92	5.84	5.64	6.71	6.43	5.45
Canada	8.78	10.50	9.23	8.38	8.10	8.10	8.38	8.52	8.28	8.03	7.19
Austria	5.75	7.63	7.25	5.13	5.13	5.50	5.37	5.00	7.62	4.25	4.25
Belgium	7.39	9.12	6.60	6.34	6.37	5.76	6.36	6.00	5.47	7.47	7.04
Finland	16.70	15.07	11.96	10.80	24.17	13.86	11.93	11.80	11.97	11.99	11.76
France	12.27	10.95	9.01	7.28	7.05	7.08	7.31	7.31	7.28	8.80	8.38
Germany	5.61	5.62	4.64	4.61	4.49	4.39	4.41	4.45	5.00	4.01	3.79
Ireland	12.19	14.50	9.62	9.63	9.75	9.63	11.00	13.13	13.00	13.38	13.94
Italy	17.88	17.25	14.75	12.11	11.78	11.25	10.98	9.67	11.42	11.88	11.81
Netherlands	5.84	5.60	5.75	6.13	5.56	5.31	5.38	5.60	6.19	6.20	5.44
Norway	12.30	12.50	12.40	14.00	14.00	14.00	14.00	14.00	14.00	n.a.	n.a.
Spain	16.98	12.18	9.92	12.26	12.34	11.58	11.68	11.69	11.76	12.21	12.47
Sweden	11.52	11.86	11.83	9.56	9.52	8.92	8.51	8.64	8.89	9.09	12.00
Switzerland	1.88	1.50	2.00	2.25	2.00	2.00	1.00	1.00	1.12	1.00	1.00
United Kingdom	7.78	8.31	9.72	8.98	8.70	8.06	11.19	10.73	9.19	11.06	10.88
Australia	4.55	10.98	18.37	13.43	16.42	17.22	17.13	16.47	15.40	15.73	16.13
Japan	6.44	6.41	6.02	4.50	4.55	4.63	4.41	3.77	4.18	4.17	4.06
South Africa	16.06	21.13	12.50	10.75	9.81	9.63	9.63	8.87	8.50	9.00	8.50
Argentina*	14.65	17.75	4.50	5.00	7.00	6.00	7.00	7.00	7.00	7.00	4.00
Brazil	184.69	272.02	352.23	25.93	35.60	45.58	44.24	55.55	83.05	270.00	n.a.
Hong Kong	13.90	6.80	6.10	5.95	5.64	4.93	3.21	4.15	3.90	2.78	1.97
Korea	11.40	10.00	8.80	10.60	9.30	9.50	9.30	9.30	9.00	8.50	n.a.
Philippines	31.18	15.22	15.03	10.16	8.99	11.72	8.42	7.98	n.a.	n.a.	n.a.
Singapore	7.05	6.01	4.53	3.73	3.95	2.26	2.47	2.62	3.51	3.10	n.a.
Taiwan	7.65	8.07	4.50	3.50	3.50	3.50	3.50	3.50	3.00	3.25	3.25

*Percent per month.

Treasury bill rates

bond equivalent yields, at or near end of month

	1983	1984	1985	1986						1987	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	9.28	7.99	7.25	5.93	5.23	5.30	5.25	5.44	5.73	5.66	5.49
Canada	9.71	9.84	9.24	8.26	3.33	8.35	8.30	8.24	8.22	7.24	7.28
Belgium	11.00	10.90	9.89	7.45	7.45	7.45	7.48	7.45	7.50	7.88	7.75
Ireland	12.01	15.10	11.15	10.13	10.65	10.61	13.79	14.22	13.60	n.a.	n.a.
Italy	16.29	14.19	12.70	10.44	10.13	10.34	10.13	10.00	10.00	9.94	n.a.
Netherlands	5.63	5.88	5.69	5.75	4.75	5.63	5.38	5.81	6.37	5.94	5.88
Spain	14.48	12.00	9.25	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.a.
Sweden	11.75	11.83	12.49	9.29	9.25	8.66	8.44	9.05	9.20	10.25	10.80
United Kingdom	9.04	9.33	11.49	9.76	9.56	9.93	10.85	10.96	10.75	10.56	10.47
Australia	8.54	12.27	19.40	14.98	17.20	17.51	16.18	15.49	14.91	16.64	16.32
Japan	4.91	4.91	4.91	3.39	3.39	3.39	3.39	2.89	2.89	2.89	2.89
New Zealand	7.80	13.50	17.62	15.35	16.53	15.36	16.00	16.44	19.69	22.36	25.38
South Africa	18.43	21.94	12.99	10.22	9.51	9.20	9.17	8.62	8.84	8.77	8.78
Brazil	179.15	273.03	379.77	26.30	36.00	42.00	45.00	33.00	149.00	276.40	n.a.
Mexico	53.78	48.67	72.98	n.t.	n.t.	n.t.	n.t.	103.77	104.03	104.64	104.83
Philippines	15.99	47.14	16.45	14.59	13.00	12.75	12.58	11.32	n.a.	n.a.	n.a.
Singapore	2.59	2.91	2.94	2.54	2.15	2.01	1.99	1.93	2.10	2.19	n.a.

Representative money market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money market instruments other than Treasury bills, at or near end of month

	1983	1984	1985	1986						1987	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	9.89	8.34	8.01	6.39	5.65	5.96	5.81	5.79	7.78	6.76	6.06
Canada	9.87	10.10	9.45	8.55	8.35	8.50	8.50	8.35	8.20	7.55	7.45
Belgium	11.15	10.85	9.89	7.40	7.40	7.35	7.35	7.40	7.60	7.55	7.70
France	12.19	10.69	9.12	7.25	7.13	7.43	7.50	7.60	8.37	8.50	n.a.
Germany	6.30	5.75	4.80	4.65	4.30	4.40	4.60	4.65	4.85	3.90	n.a.
Ireland	12.19	15.13	12.00	10.75	10.63	11.25	14.00	14.44	14.06	n.a.	n.a.
Italy	17.88	16.88	15.13	11.38	11.00	10.62	11.00	11.12	11.37	11.38	n.a.
Netherlands	6.00	5.75	5.75	5.56	5.25	5.44	5.44	5.81	6.19	5.44	5.50
Portugal	24.11	24.57	20.71	15.95	15.93	15.96	15.96	15.93	15.96	14.96	n.a.
Spain	19.00	12.21	10.51	12.51	12.18	11.53	11.41	11.52	11.79	12.35	12.60
Switzerland	3.88	5.00	4.75	4.88	4.25	4.25	4.19	4.00	4.50	3.75	4.00
United Kingdom	9.31	9.88	12.75	9.88	9.63	10.38	11.13	11.44	11.25	11.13	11.00
Australia	9.05	12.90	19.75	15.10	17.70	17.85	16.45	15.85	15.10	16.40	16.63
Japan	6.45	6.33	7.03	4.65	4.53	4.75	4.54	4.43	4.34	4.22	3.96
New Zealand	11.75	15.00	20.00	16.80	16.30	16.50	16.50	16.50	24.25	23.60	25.13
South Africa	19.12	22.78	13.35	10.55	9.35	9.55	9.65	8.90	8.55	9.20	9.05
Chile	20.68	20.68	22.42	15.39	11.35	12.68	20.98	20.98	19.56	25.34	n.a.
Hong Kong	14.88	8.25	6.50	6.31	5.00	5.25	4.38	4.44	4.62	3.44	4.38
Indonesia	19.50	19.00	15.00	15.00	14.00	14.50	14.25	14.50	19.50	16.50	16.00
Korea	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	n.a.
Malaysia	9.80	10.30	8.20	9.80	11.75	12.00	9.50	6.70	6.00	5.30	3.30
Philippines	15.61	33.21	14.61	12.47	11.76	9.89	11.19	10.31	n.a.	n.a.	n.a.
Singapore	8.44	7.00	5.88	4.31	3.94	3.25	2.94	3.19	3.94	3.34	n.a.
Taiwan	8.07	7.85	4.10	3.27	2.81	2.65	2.65	2.80	n.a.	n.a.	n.a.
Thailand	16.00	12.00	15.50	8.00	8.00	7.50	7.50	7.75	7.75	7.75	n.a.

Commercial bank deposit rates

at or near end of month

	1983	1984	1985	1986						1987	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	9.70	8.35	7.75	6.33	5.47	5.80	5.75	5.78	6.30	6.00	6.13
Canada	9.62	10.05	9.40	8.50	8.30	8.45	8.45	8.30	8.15	7.50	7.40
Austria	6.50	7.50	6.50	5.13	5.13	5.75	5.62	5.37	5.50	5.12	4.75
Belgium	11.25	10.63	9.63	7.25	7.19	7.25	7.31	7.37	7.44	7.75	7.69
Denmark	6.00	6.00	7.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	n.a.
Finland	5.25	5.25	4.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
France	7.66	7.04	6.12	4.50	4.50	4.50	4.50	4.50	4.50	4.50	n.a.
Germany	5.90	5.25	4.40	4.45	4.45	4.40	4.50	4.60	4.80	4.70	n.a.
Ireland	11.75	14.63	11.87	10.00	10.00	10.50	12.00	14.12	13.75	n.a.	n.a.
Italy	13.25	11.64	11.85	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Netherlands	6.13	5.69	5.81	5.44	5.19	5.31	5.31	5.69	6.06	5.31	5.38
Norway	12.75	12.75	12.00	13.00	13.00	13.00	13.00	n.a.	n.a.	n.a.	n.a.
Portugal	21.50	28.00	20.00	15.50	15.50	15.50	15.00	15.00	15.00	15.00	n.a.
Spain	12.62	11.64	9.64	8.89	8.89	8.78	8.75	8.65	8.67	8.54	n.a.
Sweden	11.70	11.45	12.18	9.80	9.70	9.27	8.83	9.85	9.93	10.30	11.00
Switzerland	3.50	4.50	4.50	4.63	4.00	4.00	3.94	3.75	4.25	3.50	3.75
United Kingdom	9.31	9.88	11.75	9.88	9.63	10.37	11.13	11.25	11.19	11.00	10.59
Australia	10.40	12.75	18.80	14.46	16.68	17.82	16.71	15.78	15.56	15.73	16.62
Japan	6.40	6.38	7.05	4.70	4.80	4.95	4.63	4.59	4.55	4.16	4.22
New Zealand	11.75	15.25	19.98	16.47	16.57	15.50	16.60	19.00	23.50	22.72	23.70
South Africa	20.13	22.88	13.20	10.80	9.75	9.50	9.75	9.25	8.65	9.50	9.25
Argentina*	14.50	31.23	5.40	4.48	6.18	6.94	7.65	7.97	8.41	8.81	4.43
Brazil	23.00	27.00	18.00	30.00	42.00	44.00	49.00	85.00	220.00	n.a.	n.a.
Chile	20.57	20.68	23.60	16.49	13.62	16.49	20.70	20.27	20.98	26.97	n.a.
Hong Kong	14.88	8.25	6.50	6.31	5.00	5.25	4.38	4.44	4.62	3.44	4.38
Korea	7.60	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	n.a.
Malaysia	7.75	9.58	7.00	7.00	7.00	7.00	7.00	6.50	6.33	4.83	4.66
Mexico	57.15	47.45	72.90	87.50	87.50	94.30	94.30	94.30	94.30	94.30	94.30
Philippines	14.96	31.01	12.34	10.12	10.88	9.77	9.35	9.55	n.a.	n.a.	n.a.
Singapore	7.44	6.13	5.26	4.26	3.88	3.19	2.88	3.13	3.63	3.19	n.a.
Taiwan	7.00	6.50	5.25	4.50	4.25	4.50	4.00	4.00	4.00	4.00	4.00
Thailand	10.00	13.00	10.50	7.50	6.75	6.75	6.75	6.75	6.75	6.75	n.a.
Venezuela	12.00	12.50	8.00	9.00	9.00	8.00	8.00	8.00	8.00	8.00	8.00

*Percent per month.

Domestic government bond yields

long-term issues, at or near end of month

	1983	1984	1985	1986						1987	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	12.00	11.61	9.49	7.88	7.51	7.95	7.81	7.69	7.79	7.17	7.62
Canada	12.02	11.66	10.04	9.36	9.16	9.44	9.53	9.26	9.23	8.94	9.10
Austria	8.02	8.04	7.61	7.20	7.11	7.06	7.25	7.36	7.33	7.25	7.06
Belgium	11.89	11.56	9.60	7.47	7.24	7.36	7.31	7.41	7.70	7.57	n.a.
Denmark	12.96	14.60	9.87	10.64	11.24	11.11	11.16	11.80	11.70	11.33	n.a.
Finland	11.16	10.73	10.58	8.25	8.15	7.75	7.90	7.74	7.80	7.78	7.82
France	13.96	12.70	11.33	8.55	8.05	8.51	8.97	9.49	9.89	9.54	n.a.
Germany	8.38	7.17	6.57	6.07	5.95	6.26	6.44	6.33	6.25	6.20	n.a.
Ireland	14.25	14.90	11.84	10.33	11.33	12.46	13.65	13.49	13.97	n.a.	n.a.
Italy	17.69	14.52	13.66	11.06	10.81	10.43	10.26	10.33	10.21	9.78	n.a.
Netherlands	8.58	7.72	6.96	6.22	6.03	6.04	6.22	6.30	6.40	6.21	6.15
Norway	12.50	12.00	13.10	13.42	13.40	13.40	13.40	n.a.	n.a.	n.a.	n.a.
Portugal	22.11	22.23	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	17.25	13.93	12.30	11.52	11.52	11.10	10.15	10.29	10.36	10.74	10.59
Sweden	12.30	12.04	12.11	9.76	9.63	9.49	9.31	10.35	10.66	11.70	11.23
Switzerland	4.53	4.60	4.42	4.39	4.26	4.26	4.19	4.16	4.05	4.02	4.06
United Kingdom	9.94	10.25	10.35	9.45	9.31	10.31	10.40	10.58	10.17	10.64	9.51
Australia	13.65	13.50	14.85	14.02	14.10	13.85	13.60	13.60	13.40	13.60	14.10
Japan	7.45	6.47	5.92	4.83	4.57	4.65	4.95	4.77	4.66	4.23	4.30
New Zealand	10.50	16.90	17.00	16.20	15.90	15.35	15.20	16.00	15.85	16.20	16.65
South Africa	13.64	16.55	18.09	16.00	14.03	15.24	15.83	14.13	15.08	15.33	15.30
Philippines	14.47	18.54	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.a.	n.a.	n.a.
Venezuela	13.50	14.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00

Commercial bank lending rates to prime borrowers

at or near end of month

	1983	1984	1985	1986						1987	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	11.00	10.75	9.50	8.00	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Canada	11.00	11.25	10.00	9.75	9.75	9.75	9.75	9.75	9.75	9.25	9.25
Austria	9.25	9.25	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	8.75
Belgium	13.75	14.00	11.50	9.75	9.75	9.75	9.75	9.75	9.75	10.75	10.25
Denmark	10.00	10.50	8.50	7.50	8.00	8.00	8.00	8.00	8.00	9.50	n.a.
Finland	10.18	10.68	10.37	8.76	8.79	8.77	8.75	8.74	8.81	8.81	n.a.
France	12.25	12.00	10.60	9.60	9.60	9.45	9.45	9.45	9.45	9.45	9.45
Germany	7.75	7.75	7.25	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.25
Ireland	13.75	15.75	12.50	12.25	12.25	12.25	15.75	15.75	15.75	n.a.	n.a.
Italy	18.75	18.00	15.88	13.50	13.50	13.00	13.00	13.00	13.00	13.00	13.00
Netherlands	7.00	6.25	6.25	6.50	5.88	5.88	5.88	6.12	7.12	6.13	5.75
Norway	13.50	13.00	12.40	15.25	15.25	15.75	15.88	n.a.	n.a.	n.a.	n.a.
Portugal	30.00	29.00	22.50	18.00	18.00	18.00	17.50	17.50	17.50	17.50	n.a.
Spain	17.31	15.84	14.75	14.37	14.36	14.29	14.25	14.23	14.22	14.24	14.24
Sweden	13.50	14.50	15.05	12.75	12.75	11.50	11.50	11.50	11.50	11.50	11.50
Switzerland	6.00	6.00	6.00	5.75	5.75	5.75	5.75	5.75	5.75	5.25	5.25
United Kingdom	9.00	9.50	11.50	10.00	10.00	10.00	11.00	11.00	11.00	11.00	11.00
Australia	12.75	14.00	21.00	17.25	16.50	19.00	19.00	18.45	18.25	18.00	18.25
Japan	5.89	5.70	5.71	4.57	4.52	4.48	4.48	4.45	4.35	n.a.	n.a.
New Zealand	11.00	14.00	21.00	17.00	16.50	17.00	17.00	18.50	18.50	24.00	25.00
South Africa	20.00	24.00	16.50	14.50	14.00	13.50	13.50	13.50	12.00	12.50	12.50
Argentina*	15.50	32.05	7.30	5.57	7.70	8.62	8.70	8.85	11.30	9.85	5.45
Brazil	24.00	31.00	19.00	32.00	44.00	46.00	51.00	88.00	250.00	n.a.	n.a.
Chile	30.90	60.82	33.34	28.77	26.38	23.51	27.20	29.13	29.13	33.57	n.a.
Hong Kong	13.50	11.00	7.00	7.50	6.50	6.50	6.50	6.50	6.50	5.00	5.00
Indonesia	19.75	23.50	18.75	18.75	18.75	18.75	18.25	18.25	19.75	20.50	19.50
Korea	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	n.a.
Malaysia	11.00	12.00	10.50	10.50	10.50	10.50	10.50	10.50	10.00	9.00	9.00
Mexico	56.44	47.54	65.66	81.36	84.40	87.72	91.48	94.19	95.33	95.89	96.20
Philippines	18.00	44.00	15.00	14.00	13.50	13.00	12.00	11.00	10.00	n.a.	n.a.
Singapore	8.98	9.40	7.20	7.05	6.83	6.45	6.28	6.10	6.10	6.10	n.a.
Taiwan	10.25	10.00	9.50	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
Thailand	16.00	16.50	15.50	12.75	12.00	12.00	12.00	12.00	12.00	12.00	n.a.
Venezuela	16.00	16.00	13.00	14.00	14.00	13.00	13.00	13.00	13.00	13.00	13.00

*Percent per month.

Domestic corporate bond yields

long-term issues, at or near end of month

	1983	1984	1985	1986						1987	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	12.63	12.25	10.15	9.25	8.63	9.00	9.00	8.88	8.88	8.50	8.55
Canada	12.89	12.42	10.74	10.19	10.00	10.32	10.39	10.21	10.18	9.67	9.90
France	14.35	12.94	11.76	9.12	8.37	8.92	9.36	9.77	10.18	9.92	n.a.
Germany	8.30	7.20	6.90	6.60	6.40	6.30	6.40	6.60	6.50	6.50	n.a.
Netherlands	8.51	7.51	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.
Norway	13.25	12.75	14.00	14.90	15.00	15.50	15.00	n.a.	n.a.	n.a.	n.a.
Spain	20.07	18.32	14.92	13.22	13.68	13.38	13.24	13.61	13.40	13.72	14.13
Sweden	12.21	12.33	13.25	10.88	10.99	10.82	10.77	11.72	11.99	13.00	12.63
Switzerland	4.92	5.09	4.93	4.84	4.77	4.77	4.73	4.71	4.72	4.62	4.56
United Kingdom	11.57	11.64	11.47	10.49	10.32	10.34	11.58	11.43	11.71	11.30	10.58
Japan	7.49	7.11	6.79	6.35	6.11	6.10	6.18	6.05	5.93	5.46	n.a.
Korea	14.20	15.00	13.60	12.90	12.80	12.80	12.80	12.80	12.70	12.70	n.a.
Venezuela	18.00	18.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00

Key to data in tables

I. International markets

Data on the *international banking market size* are based on resident and nonresident Eurocurrency (i.e., foreign currency) assets and liabilities and on nonresident domestic currency assets and liabilities of banks in nearly all European countres, the Bahamas, Bahrain, Canada, Cayman Islands, Hong Kong, Japan, Netherlands Antilles, Panama, Singapore, and the United States. All assets and liabilities of international banking facilities (IBFs) of banks in the United States are treated as Eurocurrencies.

An *international bond issue* may be either a Eurobond issue or a foreign bond issue. A *Eurobond issue* is one placed principally in countries other than that of the currency in which the bond is denominated, usually through an international syndicate. A *foreign bond issue* is one issued by a nonresident borrower on the market of a single country and denominated in that country's currency. Data on new international bond issue volume include all publicly announced issues of straight bonds, convertibles, bonds with warrants, floating rate notes, and certificates of deposit with an original maturity of three years or more (one year or more beginning in 1985), whether publicly or privately placed.

An *international bank credit* may be either a Eurocurrency credit or a foreign credit. A *Eurocurrency credit* is one denominated in a currency that is foreign to the country of the bank office extending the credit. *A foreign credit* is one extended to a nonresident borrower and denominated in the domestic currency of the country in which the bank office extending the credit is located. Data on new international bank credit volume include all publicly announced bank credits with an original maturity of one year or more (term loans, revolving lines of credit, and facilities to back up the issuance of other financial instruments such as commercial paper, short-term notes, certificates of deposit and banker's acceptances).

Data on international bond issues and bank credits through 1984 were compiled by Morgan Guaranty Trust Company. Beginning in January 1985 these data are based on figures published in the OECD's *Financial Statistics Monthly*.

II. Domestic markets

Central bank discount rates

Rates shown are the official discount rates with the exception of:

Ireland — Short Term Facility rate.

South Africa — discount rate for 90-day banker's acceptances.

United Kingdom — rate of discount for outright purchases of 15- to 33-day bank bills.

Day-to-day money rates

Argentina—7-day interbank money regulated by the central bank.

Austria — day-to-day interbank rate.

Australia — effective interest rate in the official short-term money market.

Belgium — day-to-day loan rate in the call money market.

Brazil — interbank overnight money.

Canada—chartered banks' day-to-day loans.

Finland — Bank of Finland call money.

France — interbank call money against private paper.

Germany — interbank call money.

Hong Kong — interbank 24-hour call rate.

Ireland — interbank call money.

Italy — interbank 48-hour call money.

Japan—Tokyo interbank call money, unconditional lenders rate.

Korea — overnight interbank call money.

Netherlands — open-market call money.

Norway — day-to-day interbank rate.

Philippines — interbank call loan rate.

Singapore — interbank overnight money.

South Africa — discount houses basic call rate.

Spain — day-to-day interbank rate.

Sweden — interbank call money.

Switzerland — call money.

Taiwan — private interbank overnight loan rate.

United Kingdom — call money.

United States — federal funds rate.

Treasury bill rates

Australia — 13-week Treasury notes at tender.

Belgium — new issue of 3-month Treasury certificates.

Brazil — 3-month Treasury bills.

Canada — 3-month Treasury bills at tender.

Ireland — 3-month central bank exchequer bills at tender.

Italy — 6-month Treasury bills.

Japan — 60- to 62-day noninterest-bearing discount government bills.

Mexico — 3-month Federal Treasury bills.

Netherlands — 3-month Treasury bills.

New Zealand — tap issue rate for 3-month Treasury bills until December 1984. As of January 1985, 3-month Treasury bills at tender.

Philippines — simple average of 91-day Treasury bills at tender until June 1984. Beginning July 1984 rates refer to the weighted average interest rate on 91- to 183-day Treasury bills sold to banks under negotiated basis.

Singapore — 91-day Treasury bills at tender.

South Africa — 3-month Treasury bills at tender.

Spain — 6-month Treasury bills at tender until March 1984. As of April 1984, 3-month Treasury bill repos reported by the Bank of Spain (average of quotations during the month).

Sweden — new issues of 3-month Treasury bills until June 1982. New series as of July 1982, 6-month Treasury discount notes, market rate.

United Kingdom — 91-day Treasury bills at tender.

United States — 3-month Treasury bills.

Representative money-market rates

Australia — buying rate for 90-day bank accepted commercial bills.

Belgium — 4-month Fonds des Rentes certificates.

Canada — 3-month prime finance company paper.

Chile — central bank 60-day fixed rate promissory notes (PDBC) at tender.

France — 3-month interbank money against private paper.

Germany — 3-month interbank deposits.

Hong Kong — 3-month interbank deposits.

Indonesia — 1-month interbank deposits.

Ireland — 3-month interbank deposits.

Italy — 3-month interbank deposits.

Japan — 3-month "gensaki" rate.

Korea — 3-month financial bill.

Malaysia — 3-month interbank deposits.

Netherlands — 3-month interbank deposits.

New Zealand — 90-day commercial bills.

Philippines—weighted average interest rate for 90-day promissory rates.

Portugal — average of 30- to 90-day interbank deposits.

Singapore — 3-month banker's acceptances.

South Africa—90-day banker's acceptances.

Spain — 3-month interbank rate reported by the Bank of Spain (average of quotations during the month).

Switzerland — 3-month interbank deposits.

Taiwan — 90-day banker's acceptances.

Thailand — interbank call money.

United Kingdom — 3-month interbank deposits.

United States — 3-month prime industrial paper.

Commercial bank deposit rates

Argentina — nominal 30-day time deposits. Average of bank rates published by the central bank until August 1984. New series as of September 1984, 30-day acceptances maximum interest rate.

Austria — 3-month time deposits.

Australia — 3-month certificates of deposit.

Belgium — special maximum rate for 3-month time deposits in large amounts.

Brazil — 6-month certificates of deposit with prefixed yields until July 1982. New series as of August 1982, 6-month certificates of deposit reported as a spread above monetary correction which is set every month in relationship to inflation.

Canada — 3-month time deposits.

Chile — 30-day time deposits.

Denmark — time deposits of 3-months' notice.

Finland — time deposits of six-month notice.

France — 3-month time deposits of FF. 1,000,000.

Germany — 3-month time deposits in large amounts.

Hong Kong — negotiable 3-month time deposits of more than HK$500,000.

Ireland — 3-month deposits.

Italy — 3-month time deposits of Lit. 100 million or more.

Japan — 90-day negotiable certificates of deposit issued by the Tokyo office of Morgan Guaranty Trust Company.

Korea — 3-month time deposits.

Malaysia — 3-month time deposits.

Mexico — 3-month certificates of deposit until September 1983. New series as of October 1983, 3-month promissory notes.

Netherlands — 3-month time deposits in large amounts.

New Zealand — 6-month transferable certificates of deposit.

Norway — 3-month special term deposits.

Philippines — weighted average interest rates on 60- to 90-day time deposits of sample commercial banks.

Portugal — 90- to 180-day time deposits until May 1984. New series as of June 1984, 180-day to one-year time deposits.

Key to data in tables — continued

Singapore — 3-month certificates of deposit.
South Africa — 3-month negotiable certificates of deposit.
Spain — deposits over 6 months and less than 1 year for Pts. 1 million or more reported by the Bank of Spain.
Sweden — 3-month certificates of deposit.
Switzerland — 3-month time deposits.
Taiwan — maximum rate for 3-month time deposits.
Thailand — 3-month time deposits.
United Kingdom — 3-month time deposits.
United States — 3-month negotiable certificates of deposit issued by Morgan Guaranty Trust Company.
Venezuela — 6-month negotiable certificates of deposit for domestic depositors only.

Domestic government bond yields

Austria — Austrian National Bank average yield on all outstanding government bonds.
Australia — secondary market yield for 10-year Treasury bonds.
Belgium — Belgium National Bank secondary market average yield on central government bonds of more than 5 years' maturity quoted on Brussels Stock Exchange.
Canada — Bank of Canada average yield on all direct government bonds due or callable in 10 years or more.
Denmark — 12% serial bonds maturing 2001 until April 1983. New series as of May 1983, 10% serial bonds maturing 2004.
Finland — rate of interest at issue on central government bonds intended for public subscription, weighted by sales of bonds in the latter half of each month.
France — INSEE secondary market weighted average yield of public sector bonds with a remaining maturity of 10 years or more.
Germany — Frankfurter Allgemeine Zeitung 10-year public authority bond average.
Ireland — 15-year government bonds.
Italy — average yield on fixed-interest government bonds, not including irredeemable bonds, weighted by the amounts in circulation, for maturities of 9 years or more.
Japan — secondary market average yield on longest-term life government bonds as quoted by the Securities Dealers Association of Japan.
Netherlands — Central Bureau of Statistics (CBS) average yield on three latest government bonds.
New Zealand — average yield on government bonds maturing after 5 years.
Norway — 5% government bond of 1996 until December 1982. New series as of January 1983, average yield of long-term government bonds.
Philippines — weighted average interest rate of outright sales on secondary transactions for central bank certificates of indebtedness.
Portugal — yield of 4% Centenary Loan of 1940.
South Africa — 25-year government bonds until August 1983; 20-year Republic of South Africa bonds until April 1984; new series as of May 1984, secondary market yield for the 13% due 2005 Republic of South Africa bond.
Spain — Bank of Spain secondary market weighted average yield of several central government issues with more than 2 years' maturity (average of quotations during the month).
Sweden — 15-year government bonds until October 1983. New series as of November 1983, 5-year government bond yield index, market rate.
Switzerland — Swiss Confederation bond average.
United Kingdom — F.T. (*Financial Times*) Actuaries 25-year government stock.
United States — Morgan Guaranty 20-year U.S. Government Bond Index.
Venezuela — Banco Central average yield on public-sector bond issues.

Commercial bank lending rates to prime borrowers

Argentina — average rate on 30-day loans.
Austria — overdraft rate for prime borrowers, including commission.
Australia — overdraft rate. Maximum indicator rate applying to loans of A$100,000 or more for major trading banks.
Belgium — prime overdraft rate.
Brazil — prefixed rate applied to working capital loans until July 1982; monetary-corrected free rate applied to working capital loans from August 1982 to July 1983. New series as of August 1983, maximum legal rate reported as a spread above monetary correction which is set every month in relationship to inflation. Charges for fees and commissions are often added.
Canada — prime rate.
Chile — average prime rate of six major commercial banks.
Denmark — approximate rate for loans and advances to prime borrowers.
Finland — average rates on total commercial bank lending.
France — base lending rate, excluding a commission of .05% per month on highest debit balance during the month. A spread above base rate is often added.
Germany — approximate effective overdraft rate for prime borrowers.
Hong Kong — prime lending rate set by the Hong Kong Association of Banks.
Indonesia — prime rate for domestic affiliates of foreign companies.
Ireland — AA corporate borrowing rate.
Italy — unsecured overdraft rate for prime borrowers.
Japan — average contracted interest rate for short-term loans of city banks. In addition, compensating balances may be required.
Korea — prime rate.
Malaysia — Bank of Commerce Berhad base lending rate.
Mexico — base rate or average cost of money for banks determined monthly by the Banco de Mexico S.A.
Netherlands — overdraft rate for prime borrowers, including commission.
New Zealand — overdraft rate for prime borrowers.
Norway — overdraft rate, including a commission of .25% per quarter on the total line of credit until January 1983. New series as of February 1983, special rate of first class, large borrowers.
Philippines — prescribed administrative ceiling for unsecured loans with maturities of 365 days and below, including charges until December 1982. New series as of January 1983, modal rate to prime borrowers.
Portugal — maximum rate for 90- to 180-day loans.
Singapore — most common overdraft rate, major banks.
South Africa — unsecured overdraft rate for prime borrowers.
Spain — private banks' average interest rate for 1-year loans reported by the Bank of Spain.
Sweden — overdraft rate for prime industrial borrowers, commission not included.
Switzerland — unsecured overdraft rate for prime borrowers, excluding commission of .25% per quarter on average or highest outstanding debit balance in quarter.
Taiwan — maximum rate for 3- to 12-month secured loans. Rate is an indication only and may vary from actual bank lending rate which is subject to volatile interbank rates.
Thailand — prime rate.
United Kingdom — clearing bank base lending rate. A spread above base rate is often added.
United States — prime rate of Morgan Guaranty Trust Company.
Venezuela — representative rate for domestic prime borrowers only.

Domestic corporate bond yields

Canada — McLeod, Young, Weir Co. Ltd., weighted long-term bond yield index for AA corporates.
France — INSEE secondary market weighted average yield of private company bonds with a remaining maturity of 10 years or more.
Germany — Bundesbank secondary market weighted average yield of industrial bonds with a remaining maturity of more than 3 years.
Japan — secondary market yield for NTT bond maturing March 1987.
Korea — average of yields on corporate bonds guaranteed by local banks, with an original maturity of 3- 2- 5-years.
Netherlands — CBS average yield on three 6%-6.5% corporate bonds until December 1981. As of January 1982, CBS secondary market weighted average yield on all commercial bank issues with a quotation between 92% and 103%.
Norway — 5.75% Dalen Portland-Cement bond of 1969-1984 until December 1982. New series as of January 1983 average yield of long-term industrial bonds.
Spain — Bank of Spain seconary market weighted average yield of several corporate issues with more than 3 years' maturity (average of quotations during the month).
Sweden — Central Satistical Bureau average yield on industrial bonds.
Switzerland — average yield on outstanding bonds of four leading Swiss companies. Mixture changed as of January 1982.
United Kingdom — *Financial Times* secondary market average yield of industrial and financial company debentures and loan stocks with an average of 25 years to maturity.
United States — Salomon Brothers index of new issues yields for Aa industrial bonds with five-year call protection.
Venezuela — average of yields on 15-year bond issues of Electricidad de Caracas.

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